

STIC Search Report Biotech-Chem Library

STIC Database Tracking Number: 178472

TO: Alton Pryor

Location: REM 4A39

Art Unit: 1616 February 2, 2006

Case Serial Number: 10/637163

From: P. Sheppard

Location: Remsen Building

Phone: (571) 272-2529

sheppard@uspto.gov

Search Notes	
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10/637,163

FEB - 2 2006 Scientific and Technical Information Center

SEARCH REQUEST FORM Examiner #: 74458 Date: 2 Requester's Full Name: Serial Number: 10/637 Location (Bldg/Room#): LEM4A39 (Mailbox #): 4+10 PL Results Format Preferred (circle): PAPER DISK To ensure an efficient and quality search, please attach a copy of the cover sheet, claims, and abstract or fill out the following: Title of Invention: _ Inventors (please provide full names): Earliest Priority Date: Search Topic: Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known. *For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number. e W" substituent may be

We Claim:

1. A compound of formula I:

66

1

and the geometrical isomers, enantiomers, diastereomers, and pharmaceutically acceptable

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Pryor 10 637163 - - History

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(FILE 'HCAPLUS' ENTERED AT 16:21:23 ON 02 FEB 2006)

FILE 'REGISTRY' ENTERED AT 16:33:40 ON 02 FEB 2006

L2 STR

L4 1147 SEA SSS FUL L2

L5 STR

L6 STR L7 STR

L9 1092 SEA SUB=L4 SSS FUL L5 OR L6 OR L7

L10 STR

L11 561 SEA SUB=L9 SSS FUL L10

FILE 'HCAPLUS' ENTERED AT 16:46:36 ON 02 FEB 2006

L12 38 SEA ABB=ON PLU=ON L11

D STAT QUE L12

D IBIB ABS HITSTR L12 1-38

FILE 'REGISTRY' ENTERED AT 16:51:19 ON 02 FEB 2006 L13 531 SEA ABB=ON PLU=ON L9 NOT L11

FILE 'HCAPLUS' ENTERED AT 17:12:14 ON 02 FEB 2006

36 SEA ABB=ON PLU=ON L13

L15 31 SEA ABB=ON PLU=ON L14 NOT L12

D STAT QUE L15

D IBIB ABS HITSTR L15 1-31

FILE REGISTRY

L14

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 1 FEB 2006 HIGHEST RN 873294-13-4 DICTIONARY FILE UPDATES: 1 FEB 2006 HIGHEST RN 873294-13-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

* The CA roles and document type information have been removed from * the IDE default display format and the ED field has been added, *

* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

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Pryor 10_637163- - History

http://www.cas.org/ONLINE/UG/regprops.html

FILE HCAPLUS

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FILE COVERS 1907 - 2 Feb 2006 VOL 144 ISS 6 FILE LAST UPDATED: 1 Feb 2006 (20060201/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

Page 2

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FILE 'HCAPLUS' ENTERED AT 16:46:36 ON 02 FEB 2006

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

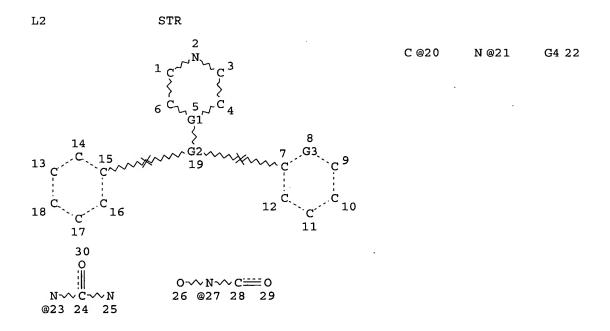
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FILE COVERS 1907 - 2 Feb 2006 VOL 144 ISS 6 FILE LAST UPDATED: 1 Feb 2006 (20060201/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.



VAR G1=C/N
VAR G2=20/21
VAR G3=CH/N
VAR G4=23/27
NODE ATTRIBUTES:
NSPEC IS RC AT 20
NSPEC IS RC AT 21
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

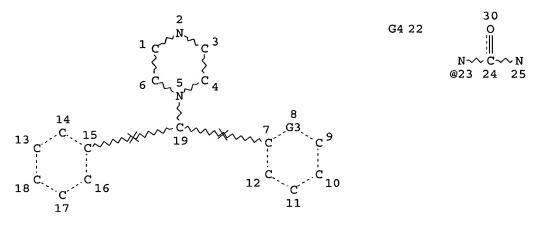
GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 30

STEREO ATTRIBUTES: NONE

L4 1147 SEA FILE=REGISTRY SSS FUL L2

L5 STR



 $0 \sim N \sim C = 0$ 26 @27 28 29

VAR G3=CH/N VAR G4 = 23/27NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 28

STEREO ATTRIBUTES: NONE L6 STR

G4 22 11 30 0 0~N~C==0 $N \sim C \sim N$ 26 @27 28 29 @23 24 25

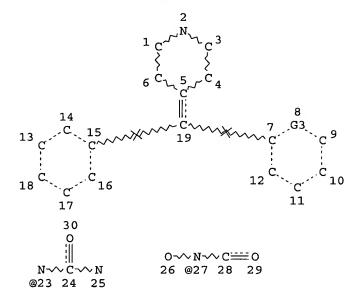
G4 22

VAR G3=CH/N
VAR G4=23/27
NODE ATTRIBUTES:
NSPEC IS RC AT 19
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 28

STEREO ATTRIBUTES: NONE L7 STR



VAR G3=CH/N
VAR G4=23/27
NODE ATTRIBUTES:
NSPEC IS RC AT 19
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 28

STEREO ATTRIBUTES: NONE

L9 1092 SEA FILE=REGISTRY SUB=L4 SSS FUL L5 OR L6 OR L7

L10 STR

Page 3

0-√-C=0 37 @38 39

VAR G1=C/N
VAR G2=20/21
VAR G3=CH/N
REP G5=(0-20) A
VAR G6=33/34/38
NODE ATTRIBUTES:
NSPEC IS RC AT 20
NSPEC IS RC AT 21
DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 29

STEREO ATTRIBUTES: NONE
L11 561 SEA FILE=REGISTRY SUB=L9 SSS FUL L10
L12 38 SEA FILE=HCAPLUS ABB=ON PLU=ON L11

=> =>

=> d ibib abs hitstr l12 1-38

L12 ANSWER 1 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:996154 HCAPLUS

DOCUMENT NUMBER: 141:410965

TITLE: Preparation of 1-(piperazinylalkyl)-3-quinolinylurea

derivatives as urotensin II antagonists

INVENTOR(S): Aissaoui, Hamed; Binkert, Christoph; Clozel, Martine;

Mathys, Boris; Mueller, Claus; Nayler, Oliver; Scherz,

Michael; Velker, Jorg; Weller, Thomas

PATENT ASSIGNEE(S): Actelion Pharmaceuticals Ltd, Switz.

SOURCE: PCT Int. Appl., 63 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.				KIND I		DATE		APPLICATION NO.					DATE				
							_					- -				_		
	WO 2004099179			A1 20041118		WO 2004-EP4716					20040504							
		W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	KZ,	LC,
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
			NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
			TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	ΥU,	ZA,	ZM,	ZW
		RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
			ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
			EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,
			SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,
			SN,	TD,	TG													
	CA	2523	566			AA		2004	1118	1	CA 2	004-3	2523	566		2	0040	504
PRIC	ORIT	APP	LN.	INFO	.:					1	WO 2	003-1	EP304	4774	2	A 2	0030	507
										1	WO 2	004-1	EP47	16	1	√ 2	0040	504
			(-1															

OTHER SOURCE(S):

MARPAT 141:410965

GΙ

AB Title compds. I [wherein Py = (un)substituted pyridinyl, quinolinyl; X = (un)substituted aryl(alkyl), alkylsulfonyl, aryl(alkyl)sulfonyl, (aryl)alkanoyl, aroyl, substituted carbamoyl; Y = CR4R5CH2, CH2CR4R5; R1 = H, Me; R4 = H, (aryl)alkyl, aryl; R5 = H, Me; or CR4R5 = carbocyclic ring; and enantiomers, diastereomers, racemates, pharmaceutically acceptable salts, solvate complexes, and morphol. forms thereof] were prepared as neurohormonal antagonists. For example, II was synthesized in four steps starting from 4-amino-2-methylquinoline, 2-chloroethyl isocyanate, piperazine-1-carboxylic acid tert-Bu ester, and benzenesulfonyl chloride (no data for intermediates). In binding assays of human [125I]-urotensin

II to human-derived TE-671 rhabdomyosarcoma cells, compds. of the invention showed activity with IC50 values ranging from 10 nM to 1000 nM. Thus, I and their pharmaceutical compns., optionally comprising other pharmacol. active compds., are useful for treating a variety of disorders associated with dysregulation of urotensin II, such as heart disease, hypertension, kidney disease, diabetes, asthma, and pulmonary disease (no data).

IT 791816-46-1P, 1-[2-(4-Benzhydrylpiperazin-1-yl)ethyl]-3-(quinolin-4-yl)urea

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(urotensin II antagonist; preparation of (piperazinylalkyl)(quinolinyl)urea derivs. as urotensin II antagonists for treatment of heart disease, hypertension, kidney disease, diabetes, asthma, pulmonary disease, and other disorders)

RN 791816-46-1 HCAPLUS

CN Urea, N-[2-[4-(diphenylmethyl)-1-piperazinyl]ethyl]-N'-4-quinolinyl- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:559502 HCAPLUS

DOCUMENT NUMBER: 141:190802

TITLE: Preparation of tricyclic antitumor compounds as

farnesyl protein transferase inhibitors

INVENTOR(S): Zhu, Hugh Y.; Njoroge, F. George; Cooper, Alan B.;

Guzi, Timothy; Rane, Dinanath F.; Minor, Keith P.;

Doll, Ronald J.; Girijavallabhan, Viyyoor M.;

Santhanam, Bama; Pinto, Patrick A.; Vibulbhan, Bancha; Keertikar, Kartik M.; Alvarez, Carmen S.; Baldwin,

John J.; Li, Ge; Huang, Chia-yu; James, Ray A.; Bishop, W. Robert; Wang, James J.-S.; Desai, Jagdish

Α.

PATENT ASSIGNEE(S): Schering Corporation, USA

SOURCE: U.S. Pat. Appl. Publ., 731 pp., Cont.-in-part of U.S.

Ser. No. 85,896.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 6

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLIC	DATE		
					-	
US 2004122018	Al	20040624	US 200	02-325896		20021219
US 2002198216	A1	20021226	US 200	01-940811		20010828
US 2003229099	A1	20031211	US 200	02-85896		20020227
US 2004122018	A1	20040624	US 200	02-325896		20021219
PRIORITY APPLN. INFO.:			US 200	01-940811	A2	20010828
			US 200	02-85896	A2	20020227
			US 200	02-325896	Α	20021219
			US 200	00-229183P	P	20000830

GI

AB Title benzo[5,6]cyclohepta[1,2-b]pyridines and analogs (I) [wherein one of a, b, d, e = N, N=O; remaining a, b, d, e = C substituted with R1 or R2; or each a, b, d, e = C substituted with R1 or R2; X = N, C, CH; A, B = independently H, (un) substituted R9, carbamoyl(alkyl), amino(alkyl), acylamino(alkyl), ureido(alkyl), etc.; R1-R4 = independently H, halo, CF3, alkoxy, amino, NO2, CN, alkyl, alkenyl, alkynyl, etc.; R5-R7a = independently H, CF3, acyl, alkyl, aryl; R8 = H, alkoxycarbonyl, aryloxycarbonyl, alkylsulfonyl, arylsulfonyl, etc.; R9 = (un)substituted heteroaryl(alkyl), arylalkoxy, heterocyclyl(alkyl), etc.; and stereoisomers, pharmaceutically acceptable salts, solvates, and prodrugs thereof] were prepared as farnesyl protein transferase (FPT) inhibitors. For example, a multi-step synthesis starting from tert-Bu 4-[8-chloro-6-(hydroxymethyl)-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11yl]-1-piperazinecarboxylate, 2-methylimidazole, and p-cyanophenyl isocyanate gave (S)-II. The latter inhibited tumor growth of mouse H-Ras fibroblasts, HTB-177 human non-small cell lung cancer cells, and LOX human melanoma cells by 98% (60 MPK, p.o., BID, x2), 96% (80 MPK, p.o., BID,

Pryor 10 637163

x3), and 90.3% (60 MPK, p.o., BID, x1), resp. Compds. of the invention inhibited FPT activity with IC50 values in the range of 0.05 nM to 100 nM and suppressed anchorage-independent growth of human tumor cells in a soft

agar assay with IC50 values in the range of <0.5 nM to 50 nM. Thus, I and their pharmaceutical compns. are useful for the treatment of proliferative diseases, such as cancer. IT592553-84-9P 592553-85-0P 592553-86-1P 592553-87-2P 592553-92-9P 592553-93-0P 592553-98-5P 592554-00-2P 592554-01-3P 592554-02-4P 592554-03-5P 592554-34-2P 592554-35-3P 592554-38-6P 740824-33-3P 740824-34-4P 740824-35-5P 740824-36-6P 740824-41-3P 740824-42-4P 740824-45-7P 740824-46-8P 740824-47-9P 740824-48-0P 740824-63-9P 740824-64-0P 740824-65-1P 740824-66-2P 740824-70-8P 740824-71-9P 740824-82-2P 740824-83-3P 740824-84-4P 740824-85-5P 740824-90-2P 740824-91-3P 740825-02-9P 740825-03-0P 740825-04-1P 740825-05-2P 740825-10-9P 740825-11-0P 740825-22-3P 740825-23-4P 740825-24-5P 740825-25-6P 740825-30-3P 740825-31-4P 740825-42-7P 740825-43-8P 740825-44-9P 740825-45-0P 740825-50-7P 740825-51-8P 740825-62-1P 740825-63-2P 740825-64-3P 740825-65-4P 740825-70-1P 740825-71-2P 740825-82-5P 740825-83-6P 740825-84-7P 740825-85-8P 740825-90-5P 740825-91-6P 740826-02-2P 740826-03-3P 740826-04-4P 740826-05-5P 740826-10-2P 740826-11-3P 740826-22-6P 740826-23-7P 740826-24-8P 740826-25-9P 740826-30-6P 740826-31-7P 740826-42-0P 740826-43-1P 740826-44-2P 740826-45-3P 740826-50-0P 740826-51-1P 740826-62-4P 740826-63-5P 740826-64-6P 740826-65-7P 740826-70-4P 740826-71-5P 740826-82-8P 740826-83-9P 740826-84-0P 740826-85-1P 740826-90-8P 740826-91-9P 740827-02-5P 740827-03-6P 740827-04-7P 740827-05-8P 740827-10-5P 740827-11-6P 740831-71-4P 740831-73-6P 740831-75-8P 740831-77-0P 740831-87-2P 740831-89-4P 740832-11-5P 740832-13-7P 740832-15-9P 740832-17-1P 740832-27-3P 740832-29-5P 740832-51-3P 740832-53-5P 740832-55-7P 740832-57-9P 740832-67-1P 740832-69-3P 740832-85-3P 740832-87-5P 740832-90-0P 740832-93-3P 740833-34-5P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (FPT inhibitor; preparation of tricyclic antitumor agents as farnesyl protein transferase inhibitors for treatment of cancer and other proliferative diseases) RN 592553-84-9 HCAPLUS CN 1-Piperazinecarboxylic acid, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 592553-85-0 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 592553-86-1 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(R)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI)

(CA INDEX NAME)

Absolute stereochemistry.

Absolute stereochemistry.

RN 592553-92-9 HCAPLUS
CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester,

stereoisomer (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 592553-93-0 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 592553-98-5 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[[[[(1,1-

dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-cyanophenyl)- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

RN 592554-00-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, tetrahydro-2H-pyran-4-yl ester (9CI) (CA INDEX NAME)

RN 592554-01-3 HCAPLUS

1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(1,1-dimethylethyl)- (9CI)

(CA INDEX NAME)

Absolute stereochemistry.

RN 592554-02-4 HCAPLUS

1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-cyclohexyl- (9CI) (CA INDEX NAME)

RN 592554-03-5 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1-methylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 592554-34-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-6-[[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 592554-35-3 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 592554-38-6 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-

benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

RN 740824-33-3 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740824-34-4 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-

1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740824-35-5 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740824-36-6 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-

[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740824-41-3 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740824-42-4 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-

dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740824-45-7 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-cyanophenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740824-46-8 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-cyanophenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740824-47-9 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-cyanophenyl)- (9CI) (CA
INDEX NAME)

RN 740824-48-0 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-cyanophenyl)- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

RN 740824-63-9 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-

11-yl]-N-[4-(1-methylethyl)phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740824-64-0 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[4-(1-methylethyl)phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740824-65-1 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[4-(1-methylethyl)phenyl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740824-66-2 HCAPLUS
CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hborgo [5-6]cycloberta [1-2-b] pyridin-11-yl] - N-[4-(1-methylothyl)phonyl]

[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[4-(1-methylethyl)phenyl]-(9CI) (CA INDEX NAME)

RN 740824-70-8 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[4-(1-methylethyl)phenyl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740824-71-9 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-

benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[4-(1-methylethyl)phenyl](9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740824-82-2 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-bromophenyl)- (9CI) (CA INDEX NAME)

RN 740824-83-3 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-bromophenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740824-84-4 HCAPLUS

CN 1-Piperazinecarboxamide, N-(4-bromophenyl)-4-[(11S)-8-chloro-6-[(R)-[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]- (9CI) (CA INDEX NAME)

RN 740824-85-5 HCAPLUS

CN 1-Piperazinecarboxamide, N-(4-bromophenyl)-4-[(11S)-8-chloro-6-[(S)-[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740824-90-2 HCAPLUS

CN 1-Piperazinecarboxamide, N-(4-bromophenyl)-4-[(11S)-8-chloro-6-[(R)-[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]- (9CI) (CA INDEX

NAME)

Absolute stereochemistry.

RN 740824-91-3 HCAPLUS

CN 1-Piperazinecarboxamide, N-(4-bromophenyl)-4-[(11S)-8-chloro-6-[(S)-[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]- (9CI) (CA INDEX NAME)

RN 740825-02-9 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-chlorophenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740825-03-0 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-chlorophenyl)- (9CI) (CA INDEX NAME)

RN 740825-04-1 HCAPLUS
CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-chlorophenyl)- (9CI) (CFINDEX NAME)

Absolute stereochemistry.

RN 740825-05-2 HCAPLUS
CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-

benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-chlorophenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740825-10-9 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-chlorophenyl)- (9CI) (CA INDEX NAME)

RN 740825-11-0 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-chlorophenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740825-22-3 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-fluorophenyl)- (9CI) (CA INDEX NAME)

RN 740825-23-4 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-fluorophenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740825-24-5 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-fluorophenyl)- (9CI) (CA

INDEX NAME)

Absolute stereochemistry.

RN 740825-25-6 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-fluorophenyl)- (9CI) (CA
INDEX NAME)

RN 740825-30-3 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-fluorophenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740825-31-4 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-fluorophenyl)- (9CI) (CA INDEX NAME)

RN 740825-42-7 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740825-43-8 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740825-44-9 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-methoxyphenyl)- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

RN 740825-45-0 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-methoxyphenyl)- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

RN 740825-50-7 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

RN 740825-51-8 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740825-62-1 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-

11-yl]-N-(4-phenoxyphenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740825-63-2 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-phenoxyphenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740825-64-3 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-phenoxyphenyl)- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

RN 740825-65-4 HCAPLUS
CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-phenoxyphenyl)- (9CI) (CA
INDEX NAME)

RN 740825-70-1 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-phenoxyphenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740825-71-2 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-

benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-phenoxyphenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740825-82-5 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 740825-83-6 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740825-84-7 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[4-(trifluoromethyl)phenyl](9CI) (CA INDEX NAME)

RN 740825-85-8 HCAPLUS
CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-

[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[4-(trifluoromethyl)phenyl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740825-90-5 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-

benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[4-(trifluoromethyl)phenyl](9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740825-91-6 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[4-(trifluoromethyl)phenyl]-(9CI) (CA INDEX NAME)

RN 740826-02-2 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[4-(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740826-03-3 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[4-(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 740826-04-4 HCAPLUS
CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[4-(1,1-dimethylethyl)phenyl](9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740826-05-5 HCAPLUS
CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-

benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[4-(1,1-dimethylethyl)phenyl](9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740826-10-2 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[4-(1,1-dimethylethyl)phenyl]-(9CI) (CA INDEX NAME)

RN 740826-11-3 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[4-(1,1-dimethylethyl)phenyl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740826-22-6 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-1-naphthalenyl- (9CI) (CA INDEX NAME)

PAGE 2-A

RN 740826-23-7 HCAPLUS

1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-1-naphthalenyl- (9CI) (CA INDEX NAME)

PAGE 2-A

RN 740826-24-8 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-1-naphthalenyl- (9CI) (CA
INDEX NAME)

PAGE 2-A

RN 740826-25-9 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)[((ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-1-naphthalenyl- (9CI) (CA
INDEX NAME)

PAGE 2-A

RN 740826-30-6 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-1-naphthalenyl- (9CI) (CA INDEX NAME)

PAGE 2-A

RN 740826-31-7 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-1-naphthalenyl- (9CI) (CA INDEX NAME)

PAGE 2-A

RN 740826-42-0 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-benzoyl- (9CI) (CA INDEX NAME)

RN 740826-43-1 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-benzoyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740826-44-2 HCAPLUS

CN 1-Piperazinecarboxamide, N-benzoyl-4-[(11S)-8-chloro-6-[(R)-[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740826-45-3 HCAPLUS

CN 1-Piperazinecarboxamide, N-benzoyl-4-[(11S)-8-chloro-6-[(S)-[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740826-50-0 HCAPLUS

CN 1-Piperazinecarboxamide, N-benzoyl-4-[(11S)-8-chloro-6-[(R)-[[[(1,1-

dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740826-51-1 HCAPLUS

CN 1-Piperazinecarboxamide, N-benzoyl-4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]- (9CI) (CA INDEX NAME)

RN 740826-62-4 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740826-63-5 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 740826-64-6 HCAPLUS
CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R) [[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(phenylmethyl)- (9CI) (CA
 INDEX NAME)

Absolute stereochemistry.

RN 740826-65-7 HCAPLUS
CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-

benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740826-70-4 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 740826-71-5 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740826-82-8 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-3-pyridinyl- (9CI) (CA INDEX NAME)

RN 740826-83-9 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-3-pyridinyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740826-84-0 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-3-pyridinyl-(9CI) (CA INDEX

NAME)

Absolute stereochemistry.

RN 740826-85-1 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-3-pyridinyl- (9CI) (CA INDEX NAME)

RN 740826-90-8 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-3-pyridinyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740826-91-9 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-3-pyridinyl- (9CI) (CA INDEX NAME)

RN 740827-02-5 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[(4-methylphenyl)methyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

RN 740827-03-6 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[(4-methylphenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

740827-04-7 HCAPLUS

RN

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-

benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[(4-methylphenyl)methyl](9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

RN 740827-05-8 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[(4-methylphenyl)methyl](9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RN 740827-10-5 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[(4-methylphenyl)methyl]-(9CI) (CA INDEX NAME)

PAGE 1-A

RN 740827-11-6 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-[(4-methylphenyl)methyl]-(9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RN 740831-71-4 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, methyl ester (9CI) (CA INDEX NAME)

RN 740831-73-6 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740831-75-8 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(R)-[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740831-77-0 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(S)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740831-87-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, methyl ester (9CI) (CA INDEX

NAME)

Absolute stereochemistry.

RN 740831-89-4 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740832-11-5 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-

methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740832-13-7 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740832-15-9 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(R)-

[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740832-17-1 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(S)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 740832-27-3 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740832-29-5 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 740832-51-3 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, propyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740832-53-5 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, propyl ester (9CI) (CA INDEX NAME)

RN 740832-55-7 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(R)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, propyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740832-57-9 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(S)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, propyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740832-67-1 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, propyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740832-69-3 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-

benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, propyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740832-85-3 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1-methylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740832-87-5 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-

methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1-methylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 740832-90-0 HCAPLUS

CN

1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(R)-[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1-methylethyl ester (9CI) (CAINDEX NAME)

Absolute stereochemistry.

RN 740832-93-3 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(S)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1-methylethyl ester (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

RN 740833-34-5 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(S)-[[(1-methylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

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IT 592554-89-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of tricyclic antitumor agents as farnesyl protein transferase inhibitors for treatment of cancer and other proliferative diseases)

RN 592554-89-7 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[3-bromo-8-chloro-6-[(methoxymethylamino)carbonyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-

yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L12 ANSWER 3 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:559501 HCAPLUS

DOCUMENT NUMBER: 141:106498

TITLE: Preparation of tricyclic antitumor compounds as

farnesyl protein transferase inhibitors

INVENTOR(S): Zhu, Hugh Y.; Njoroge, F. George; Cooper, Alan B.;

Guzi, Timothy; Rane, Dinanath F.; Minor, Keith P.;

Doll, Ronald J.; Girijavallabhan, Viyyoor M.;

Santhanam, Bama; Pinto, Patrick A.; Vibulbhan, Bancha; Keertikar, Kartik M.; Alvarez, Carmen S.; Baldwin, John J.; Li, Ge; Huang, Chia-yu; James, Ray A.;

Bishop, W. Robert; Wang, James J.-S.; Desai, Jagdish

Α.

PATENT ASSIGNEE(S): Schering Corporation, USA

SOURCE: U.S. Pat. Appl. Publ., 731 pp., Cont.-in-part of U.S.

Ser. No. 85,896.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

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PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004122018	A1	20040624	US 2002-325896	20021219
US 2002198216	A1	20021226	US 2001-940811	20010828

US 2003229099	A1	20031211	US	2002-85896		20020227
US 2004122018	A1	20040624	US	2002-325896		20021219
PRIORITY APPLN. INFO.:			US	2001-940811	A2	20010828
			US	2002-85896	A2	20020227
			US	2002-325896	Α	20021219
			US	2000-229183P	P	20000830

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AB Title benzo[5,6]cyclohepta[1,2-b]pyridines and analogs (I) [wherein one of a, b, d, e = N, N=O; remaining a, b, d, e = C substituted with R1 or R2; or each a, b, d, e = C substituted with R1 or R2; X = N, C, CH; A, B = independently H, (un) substituted R9, carbamoyl(alkyl), amino(alkyl), acylamino(alkyl), ureido(alkyl), etc.; R1-R4 = independently H, halo, CF3, alkoxy, amino, NO2, CN, alkyl, alkenyl, alkynyl, etc.; R5-R7a = independently H, CF3, acyl, alkyl, aryl; R8 = H, alkoxycarbonyl, aryloxycarbonyl, alkylsulfonyl, arylsulfonyl, etc.; R9 = (un)substituted heteroaryl(alkyl), arylalkoxy, heterocyclyl(alkyl), etc.; and stereoisomers, pharmaceutically acceptable salts, solvates, and prodrugs thereof] were prepared as farnesyl protein transferase (FPT) inhibitors. For example, a multi-step synthesis starting from tert-Bu 4-[8-chloro-6-(hydroxymethyl)-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11yl]-1-piperazinecarboxylate, 2-methylimidazole, and p-cyanophenyl isocyanate gave (S)-II. The latter inhibited tumor growth of mouse H-Ras fibroblasts, HTB-177 human non-small cell lung cancer cells, and LOX human melanoma cells by 98% (60 MPK, p.o., BID, x2), 96% (80 MPK, p.o., BID, x3), and 90.3% (60 MPK, p.o., BID, x1), resp. Compds. of the invention inhibited FPT activity with IC50 values in the range of 0.05 nM to 100 nM and suppressed anchorage-independent growth of human tumor cells in a soft agar assay with IC50 values in the range of <0.5 nM to 50 nM. Thus, I and their pharmaceutical compns. are useful for the treatment of proliferative diseases, such as cancer.

IT 592553-84-9P 592553-86-1P 592553-92-9P 592553-98-5P 592554-00-2P 592554-01-3P 592554-02-4P 592554-03-5P 721441-47-0P 721441-48-1P 721441-49-2P 721441-50-5P 721441-53-8P 721441-54-9P 721441-65-2P 721441-66-3P 721441-67-4P 721441-68-5P

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721441-73-2P 721441-74-3P 721441-85-6P
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    721442-60-0P 721442-61-1P 721442-62-2P
    721442-63-3P 721442-70-2P 721442-71-3P
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    721442-85-9P 721442-90-6P 721442-91-7P
    721443-02-3P 721443-03-4P 721443-04-5P
    721443-05-6P 721443-10-3P 721443-11-4P
    721443-20-5P 721443-21-6P 721443-22-7P
    721443-23-8P
    RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (FPT inhibitor; preparation of tricyclic antitumor agents as farnesyl
        protein transferase inhibitors for treatment of cancer and other
       proliferative diseases)
    592553-84-9 HCAPLUS
RN
     1-Piperazinecarboxylic acid, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-
CN
    methyl-1H-imidazol-5-yl) methyl]-8-chloro-11H-benzo[5,6] cyclohepta[1,2-
    b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)
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Absolute stereochemistry.

RN 592553-86-1 HCAPLUS
CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(R)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI)
(CA INDEX NAME)

RN 592553-92-9 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester, stereoisomer (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 592553-98-5 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-cyanophenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 592554-00-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, tetrahydro-2H-pyran-4-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 592554-01-3 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-

benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(1,1-dimethylethyl)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

RN 592554-02-4 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-cyclohexyl- (9CI) (CA INDEX NAME)

RN 592554-03-5 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1-methylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721441-47-0 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]- (9CI) (CA INDEX NAME)

RN 721441-48-1 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721441-49-2 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]- (9CI) (CA INDEX NAME)

RN 721441-50-5 HCAPLUS
CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721441-53-8 HCAPLUS
CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]- (9CI) (CA INDEX NAME)

RN 721441-54-9 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721441-65-2 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-methyl- (9CI) (CA INDEX NAME)

RN 721441-66-3 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721441-67-4 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-methyl- (9CI) (CA INDEX NAME)

RN 721441-68-5 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721441-73-2 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-methyl- (9CI) (CA INDEX NAME)

RN 721441-74-3 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721441-85-6 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)

RN 721441-86-7 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721441-87-8 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(1-methylethyl)- (9CI) (CA
INDEX NAME)

721441-88-9 HCAPLUS RN1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-CN [[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-

benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN721441-93-6 HCAPLUS 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-CNdimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721441-94-7 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721442-05-3 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-

11-yl]-N-ethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721442-06-4 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-ethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721442-07-5 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-

benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-ethyl- (9CI) (CA INDEX NAME)
Absolute stereochemistry.

RN 721442-08-6 HCAPLUS
CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-ethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721442-16-6 HCAPLUS
CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-

benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-ethyl- (9CI) (CA INDEX NAME)
Absolute stereochemistry.

RN 721442-18-8 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-ethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721442-24-6 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-

11-yl]-N-(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721442-25-7 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721442-26-8 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-

benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(1,1-dimethylethyl)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

RN 721442-27-9 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(1,1-dimethylethyl)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

RN 721442-40-6 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721442-41-7 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721442-42-8 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721442-43-9 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721442-48-4 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721442-49-5 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721442-60-0 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(2-methylpropyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721442-61-1 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(2-methylpropyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721442-62-2 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(2-methylpropyl)- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

RN 721442-63-3 HCAPLUS
CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(2-methylpropyl)- (9CI) (C.
INDEX NAME)

RN 721442-70-2 HCAPLUS

1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(2-methylpropyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721442-71-3 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(2-methylpropyl)- (9CI) (CA INDEX NAME)

RN 721442-82-6 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-2-propenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721442-83-7 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-2-propenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721442-84-8 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-2-propenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721442-85-9 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-

[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-2-propenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721442-90-6 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-2-propenyl- (9CI) (CA INDEX NAME)

RN 721442-91-7 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-2-propenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721443-02-3 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-

11-yl]-N-cyclopentyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721443-03-4 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-cyclopentyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721443-04-5 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-cyclopentyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721443-05-6 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-cyclopentyl- (9CI) (CA INDEX NAME)

RN 721443-10-3 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-cyclopentyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721443-11-4 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-

benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-cyclopentyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721443-20-5 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-cyclohexyl- (9CI) (CA INDEX NAME)

RN 721443-21-6 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-cyclohexyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 721443-22-7 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(R)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-cyclohexyl- (9CI) (CA INDEX NAME)

RN 721443-23-8 HCAPLUS
CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[(S)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hboxzo[5 6]gygloboxza[1 2 b]pyzidin 11 yl] N gygloboxyl (OGI) (CA INDI

[[(ethylamino)carbonyl]amino](l-methyl-lH-lmidazol-5-yl)methyl]-llH-benzo[5,6]cyclohepta[1,2-b]pyridin-ll-yl]-N-cyclohexyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L12 ANSWER 4 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2003:971730 HCAPLUS

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DOCUMENT NUMBER: 140:27844

TITLE: Preparation of tricyclic antitumor compounds as farnesyl protein transferase inhibitors

INVENTOR(S): Zhu, Hugh Y.; Njoroge, F. George; Cooper, Alan B.; Guzi, Timothy; Rane, Dinanath F.; Minor, Keith P.;

Doll, Ronald J.; Girijavallabhan, Viyyoor M.; Santhanam, Bama; Pinto, Patrick A.; Vibulbhan, Bancha; Keertikar, Kartik M.; Alvarez, Carmen S.; Baldwin, John J.; Li, Ge; Huang, Chia-Yu; James, Ray A.; Bishop, W. Robert; Wang, James J. S.; Desai, Jagdish

A.

PATENT ASSIGNEE(S): USA

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Pat. Appl. 2002 198,216.

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OTHER SOURCE(S): MARPAT 140:27844

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^{*} STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [I; one of a, b, d, e = N, N:O; remaining a, b, d, e = C (wherein each C atom has an R1 or R2 bound to said carbon); or each a, b, d, e = C (wherein each C atom has an R1 or R2); R1-R4 = H, halo, CF3,

Pryor 10 637163

alkoxy, etc.; R5-R7, R9 = H, CF3, alkyl, aryl, etc.; R8 = H, alkoxycarbonyl, aryloxycarbonyl, alkylsulfonyl, arylsulfonyl, etc.; dotted line = single or double bond; X = N, CH; A, B = (un)substituted CH, CH2], their stereoisomers, pharmaceutically acceptable salts, solvates, and prodrugs which are useful for inhibiting farnesyl protein transferase, were prepared E.g., a multi-step synthesis of II, was given. The compds. I have an FTP IC50 in the range of 0.05 nM to 100 nM. Also disclosed are pharmaceutical compns. comprising title compds. I as well as methods of using them to treat proliferative diseases such as cancer.

IT 592554-89-7P

CN

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of tricyclic antitumor compds. as farnesyl protein transferase inhibitors)

RN 592554-89-7 HCAPLUS

1-Piperazinecarboxylic acid, 4-[3-bromo-8-chloro-6-[(methoxymethylamino)carbonyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L12 ANSWER 5 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:796490 HCAPLUS

DOCUMENT NUMBER: 139:307794

TITLE: Preparation of N-hydroxy (piperazinesulfonyl) - or

(piperazinecarbonyl) arylpropenamides as inhibitors of histone deacetylase and antiproliferative agents for

the treatment of cancer and psoriasis

INVENTOR(S): Watkins, Clare J.; Romero-Martin, Maria-Rosario;

Ritchie, James; Finn, Paul W.; Kalvinsh, Ivars; Loza, Einars; Dikovska, Klara; Starchenkov, Igor; Lolya,

Daina; Gailite, Vjia

PATENT ASSIGNEE(S): Prolifix Limited, UK

SOURCE: PCT Int. Appl., 217 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

Pryor 10 637163

PATENT NO.						KIND DATE				APP	LICA	TION	DATE					
WO	WO 2003082288			A1	20031009				WO	2003	-GB14	20030403						
	W:	ΑE,	AG,	ΑL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB	, BG	, BR,	BY,	ΒZ,	CA,	CH,	CN,	
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC	, EE	, ES,	FI,	GB,	GD,	GE,	GH,	
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE	, KG	, KP,	KR,	KZ,	LC,	LK,	LR,	
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN	, MW	, MX,	MZ,	NI,	NO,	NZ,	OM,	
		PH,	ΡL,	PT,	RO,	RU,	SC,	SD,	SE,	SG	, SK	, SL,	ТJ,	TM,	TN,	TR,	TT,	
		TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA	, ZM	, ZW						
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		KG,	ΚZ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG	, CH	, CY,	CZ,	DE,	DK,	EE,	ES,	
		FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC	, NL	, PT,	RO,	SE,	SI,	SK,	TR,	
		BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ	, GW	, ML,	MR,	NE,	SN,	TD,	TG	
CA	2479	906			AA	1009		CA	2003	-2479	20030403							
BR	BR 2003008908					A 20050104					2003	-8908	20030403					
EP	EP 1492534				A1	0105		EΡ	2003	-7227	20030403							
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, II	, LI,	LU,	NL,	SE,	MC,	PT,	
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL	, TR	, BG,	CZ,	EE,	HU,	SK		
US	US 2005143385					A1 20050630					2003	-5097	32	20030403				
JP 2005527556					T2 20050915					JP	2003	-5798	20030403					
	2004																	
PRIORITY APPLN. INFO.:												-3693						
												-GB14				0030		
OTHER S	OTHER SOURCE(S):						139:	3077										

OTHER SOURCE(S): MARPAT 139:307794

$$R-Q^{1}-J^{1}-N$$
 $N-J^{2}-Q^{2}$
 $N-OH$
 $N-J^{2}$

AB N-hydroxyamides I [J1 = single bond, C(:0), J2 = C(:0), SO2; Q1 = single bond, OX, SX, XOY, XSY, XO, XS; Q2 = (un)substituted C4-C8 alkylene at least four carbon atoms in length; R = (un)substituted cycloalkyl, heterocycloalkyl, or aryl; R1 = C1-C4 alkyl; X, Y = (un)substituted alkanediyl; n = 0-8] containing piperazine moieties, particularly N-hydroxy piperazinesulfonylarylpropenamides such as II, are prepared as inhibitors of histone deacetylase (HDAC) for the treatment of proliferative diseases, cancer, and psoriasis in both humans and animals. Biol. data on the inhibition of HDAC in vitro, the inhibition of cellular proliferation in vitro, and the in vivo testing of I on mice containing i.p. P388 tumors are given for a subset of I. Most of the compds. I tested inhibit HDAC with IC50 values between 20 nM and 200 nM, inhibit proliferation of four cell lines with IC50 values between 1 μM and 10 μM, and give log rank

statistics for mice with P388 tumors (5 each) of between -3 and -5. II gives a log rank statistic for tumors in five mice of -9.62. Preparative data for approx. fifty of the title compds. are given.

IT 610801-00-8P 610801-02-0P 610801-40-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(claimed compds.; preparation of N-hydroxy (piperazinesulfonyl) - or (piperazinecarbonyl) arylpropenamides as inhibitors of histone deacetylase and antiproliferative agents for the treatment of cancer and psoriasis)

RN 610801-00-8 HCAPLUS

CN 1-Piperazineheptanamide, 4-(diphenylmethyl)-N-hydroxy-ζ-oxo- (9CI) (CA INDEX NAME)

RN 610801-02-0 HCAPLUS

CN 1-Piperazineoctanamide, 4-(diphenylmethyl)-N-hydroxy-η-oxo- (9CI) (CA INDEX NAME)

Ph₂CH

Ph₂CH

RN 610801-40-6 HCAPLUS

CN 1-Piperazineoctanamide, 4-[bis(4-fluorophenyl)methyl]-N-hydroxy-η-οxo-(9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 6 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

2

ACCESSION NUMBER: 2003:737725 HCAPLUS

DOCUMENT NUMBER: 139:245911

Pryor 10 637163

TITLE: Preparation of piperidine derivatives as therapeutic

agent for pain

INVENTOR(S): Koganei, Hajime; Iwayama, Satoshi; Takeda, Tomoko;

Kito, Morikazu; Saitou, Yuki; Ono, Yukitsugu; Kihara,

Hideaki; Yamamoto, Takashi; Shoji, Masataka

PATENT ASSIGNEE(S): Ajinomoto Co., Inc., Japan

SOURCE: PCT Int. Appl., 51 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	KIND DATE			1	APPL	ICAT:	ION 1	DATE										
WO	WO 2003076402				A1 20030918			1	WO 2	003-	JP29	20030313						
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		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KΡ,	KR,	ΚZ,	LC,	LK,	LR,	
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,	
		PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	
		TZ,	UA,	ŪĠ,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	zw						
	RW:	GH,	GM,	ΚE,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,	
		KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	
		FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,	
		BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG	
JP 2005298340							2005	1027		JP 2	002-	5917'	20020313					
AU 2003213349							2003	0922	1	AU 2	003-	2133	49		2	0030	313	
PRIORITY APPLN. INFO.:										JP 2	002-	5917'	7	Ž	A 2	0020	313	
									WO 2003-JP2993						V 20030313			

OTHER SOURCE(S): MARPAT 139:245911

GΙ

Disclosed are drugs containing as active ingredients the following piperidine derivs. (I) or analog thereof [wherein A = each (un) substituted pyridyl, piperidyl, piperidino, morpholinyl, morpholino, thiomorpholinyl, piperazinyl, C1-8 alkyl, C3-8 cycloalkyl, C1-8 alkoxy, C1-8 monoalkylamino, or C1-8 dialkylamino; X = G, halo; Y = CONH, NHCO, CONHCH2, (CH2)n, CO2 (wherein n = an integer of 0-4); Z = CH:CH, SCH2, CH2S, S, CH2CH2]. These compds. I possess N-type calcium channel inhibitory activity and are reduced in influence on the central nervous system, thereby highly safe, and are useful for the treatment of pains. Thus, 55 mg 2-[4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-

piperidinyl]ethylamine was dissolved in 0.5 mL CH2Cl2, treated with 45.7 mg and then slowly with a solution of 14.6 mg Me chloroformate in 0.5 mL CH2Cl2, stirred for 15 min, and treated with saturated aqueous NaHCO3 solution

to

CN

give, after workup and silica gel chromatog., Me 2-[4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-piperidinyl]ethylcarbamate (II). II and iso-Pr 2-[4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-piperidinyl]ethylcarbamate inhibited N-type calcium channel by 81 and 95%, resp., in human neuroblastoma cell IMR-32.

IT 599156-95-3P 599156-98-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of piperidine derivs. inhibiting N-type calcium channel as therapeutic agent for pain)

RN 599156-95-3 HCAPLUS

Urea, N-[2-[4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-piperidinyl]ethyl]-N'-(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)

RN 599156-98-6 HCAPLUS

CN Urea, N'-[2-[4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-piperidinyl]ethyl]-N,N-dimethyl-(9CI) (CA INDEX NAME)

IT 599156-81-7

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(preparation of piperidine derivs. inhibiting N-type calcium channel as therapeutic agent for pain)

RN 599156-81-7 HCAPLUS

CN Cyclohexanecarboxamide, N-[2-[4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1piperidinyl]ethyl]-1-[[(dimethylamino)carbonyl]amino]-, monohydrochloride
(9CI) (CA INDEX NAME)

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 7 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:696871 HCAPLUS

DOCUMENT NUMBER: 139:230790

TITLE: Preparation of piperazinylbenzocycloheptapyridines and

related compounds as farnesyl protein transferase

inhibitors useful as antitumor agents

INVENTOR(S): Zhu, Hugh Y.; Njoroge, F. George; Cooper, Alan B.;

Guzi, Timothy J.; Rane, Dinanath F.; Minor, Keith P.; Doll, Ronald J.; Girijavallabhan, Viyyoor Moopil; Santhanam, Bama; Pinto, Patrick A.; Vibulbhan, Bancha; Keertikar, Kartik M.; Alvarez, Carmen S.; Baldwin,

John J.; Li, Ge; Huang, Chia-Yu; James, Ray A.; Bishop, W. Robert; Wang, James J. S.; Desai, Jagdish

Α.

PATENT ASSIGNEE(S): Schering Corporation, USA; Pharmacopeia, Inc.

SOURCE: PCT Int. Appl., 560 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE -------------------20030904 WO 2003-US5479 WO 2003072549 A1 20030225 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, HR, HU,

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ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LU, LV, MA, MD,
             MG, MK, MN, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SC, SE, SG, SK,
             SL, TJ, TM, TN, TR, TT, TZ, UA, UZ, VC, VN, YU, ZA, ZM
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             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                             US 2002-85896
    US 2003229099
                                 20031211
                          Α1
                                                                     20020227
                                             US 2002-325896
    US 2004122018
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                                                                     20021219
    CA 2477328
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    BR 2003008071
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                                             EP 2003-711214
     EP 1492772
                          Α1
                                 20050105
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             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
                          T2
                                 20050825
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     JP 2005525356
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                                             NO 2004-4053
    NO 2004004053
                          Α
                                 20041126
                                                                     20040924
                                             US 2002-85896
PRIORITY APPLN. INFO.:
                                                                    20020227
                                             US 2002-325896
                                                                  Α
                                                                     20021219
                                             US 2000-229183P
                                                                  Р
                                                                     20000830
                                             US 2001-940811
                                                                  A2 20010828
                                             WO 2003-US5479
                                                                  W
                                                                     20030225
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OTHER SOURCE(S):

MARPAT 139:230790

GI

$$R^1$$
 R^2
 R^3
 R^4
 R^5
 R^7
 R^6
 R^8
 R^7
 R^7
 R^6
 R^8
 R^7
 R^7

AB Title compds. [I; 1 of a, b, c, d = N, NO, the remainder = CR1, CR2; or a, b, c, d = CR1, CR2; dotted line = optional double bond; X = N, C, CH; A, B = H, R9, R9COR9, CONHR9, etc.; R1-R4 = H, halo, CF3, OR10, COR10, SR10, NO2, N(R10)2, cyano, tetrazolylthio, (substituted) alkyl, etc.; R5, R6, R7, R7a = H, CF3, COR10, (substituted) alkyl, aryl; R5R6 = O, S; R8 = CO2R11, SO2R11, CONR11aR12, etc.; R9 = (substituted) heteroaryl, aralkoxy, heterocycloalkyl, heteroaralkenyl, etc.; R10 = H, alkyl, aryl, aralkyl; R11 = (substituted) alkyl, aryl, cycloalkyl, heteroaryl, heterocycloalkyl,

Pryor 10 637163

alkenyl, dialkylamino, etc.; R11a = H, OH, (substituted) alkyl, aryl, cycloalkyl, heteroaryl, aralkyl, arylacyl, etc.; R12 = H, alkyl, piperidinyl, cycloalkyl, alkylpiperidinyl; with provisos], were prepared Thus, title compound (II) was prepared in several steps. I inhibited farnesyl protein transferase with IC50 = 0.05-100 nM. 592553-84-9P 592553-85-0P 592553-86-1P IT 592553-87-2P 592553-92-9P 592553-93-0P 592553-98-5P 592554-00-2P 592554-01-3P 592554-02-4P 592554-03-5P 592554-34-2P 592554-35-3P 592554-38-6P 592554-74-0P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of piperazinylbenzocycloheptapyridines and related compds. as farnesyl protein transferase inhibitors useful as antitumor agents) 592553-84-9 HCAPLUS RN1-Piperazinecarboxylic acid, 4-[(11S)-6-[(R)-[(aminocarbonyl)amino](1-CN methyl-1H-imidazol-5-yl) methyl] -8-chloro-11H-benzo[5,6] cyclohepta[1,2b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 59253-85-0 HCAPLUS
CN 1-Piperazinecarboxylic acid, 4-[(11S)-6-[(S)-[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 592553-86-1 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(R)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

RN 592553-87-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(S)[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

RN 592553-92-9 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(R)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester, stereoisomer (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 592553-93-0 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[(S)-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-

benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

RN 592553-98-5 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(4-cyanophenyl)- (9CI) (CA INDEX NAME)

RN 592554-00-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, tetrahydro-2H-pyran-4-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 592554-01-3 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)

RN 592554-02-4 HCAPLUS

CN 1-Piperazinecarboxamide, 4-[(11S)-8-chloro-6-[[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-N-cyclohexyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 592554-03-5 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1-methylethyl ester (9CI) (CA

INDEX NAME)

Absolute stereochemistry.

RN 592554-34-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-6-[[(aminocarbonyl)amino](1-methyl-1H-imidazol-5-yl)methyl]-8-chloro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 592554-35-3 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[[[(ethylamino)carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H- benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

RN 592554-38-6 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[(11S)-8-chloro-6-[[[[(1,1-dimethylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 592554-74-0 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-{(11S)-8-chloro-6-[[[[(1methylethyl)amino]carbonyl]amino](1-methyl-1H-imidazol-5-yl)methyl]-11Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl]-, 1,1-dimethylethyl ester (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

IT 592554-89-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of piperazinylbenzocycloheptapyridines and related compds. as farnesyl protein transferase inhibitors useful as antitumor agents)

RN 592554-89-7 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[3-bromo-8-chloro-6-[(methoxymethylamino)carbonyl]-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L12 ANSWER 8 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2003:633456 HCAPLUS DOCUMENT NUMBER: 139:154954 Medicinal compositions containing gabapentin or TITLE: pregabalin and N-type calcium channel antagonist Iwayama, Satoshi; Koganei, Hajime; Fujita, Shinichi; INVENTOR(S): Takeda, Tomoko; Yamamoto, Hiroshi; Niwa, Seiji PATENT ASSIGNEE(S): Ajinomoto Co., Inc., Japan PCT Int. Appl., 154 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent Japanese LANGUAGE: FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE -------------------WO 2003-JP1163 20030814 WO 2003066040 **A1** 20030205 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG AU 2003-207219 AU 2003207219 Α1 20030902 20030205 EP 1481673 **A1** 20041201 EP 2003-703174 20030205 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK US 2005009814 A1 20050113 US 2004-911633 20040805 PRIORITY APPLN. INFO.: JP 2002-28208 20020205 Α JP 2002-111068 Α 20020412 JP 2002-317480 Α 20021031 WO 2003-JP1163 W 20030205 OTHER SOURCE(S): MARPAT 139:154954 Disclosed are medicinal compns. useful as preventives/remedies for pain which comprise gabapentin, pregabalin or pharmaceutically acceptable salts thereof combined with N-type calcium channel antagonists or pharmaceutically acceptable salts thereof having specified structures. A compound N-[3-[4-(5H-dibenzo[a,d][7]annulene-5-ylidene)-1-piperidinyl]-3oxopropyl]-2,2-dimethylpropanamide (I) was prepared The analgesic effect of oral administration of gabapentin 100 mg/kg combined with the compound I 3 mg/kg in pain rat model was examined 500894-75-7P 500894-93-9P 572923-86-5P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (medicinal compns. containing gabapentin or pregabalin and N-type calcium channel antagonist) RN 500894-75-7 HCAPLUS Piperidine, 4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-[[[[(1,1-CN dimethylethyl)amino]carbonyl]amino]acetyl]- (9CI) (CA INDEX NAME)

RN 500894-93-9 HCAPLUS

CN Piperidine, 4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1[[[(dimethylamino)carbonyl]amino]acetyl]- (9CI) (CA INDEX NAME)

RN 572923-86-5 HCAPLUS

CN Piperidine, 4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-[3-[[[(1,1-dimethylethyl)amino]carbonyl]amino]-1-oxopropyl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 9 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:173572 HCAPLUS

DOCUMENT NUMBER: 138:221602

Preparation of diarylalkene and diarylalkane TITLE:

derivatives as N-type calcium channel antagonists Yamamoto, Takashi; Niwa, Seiji; Otani, Kayo; Ohno, INVENTOR(S): Seiji; Koganei, Hajime; Iwayama, Satoshi; Takahara,

Akira; Ono, Yukitsugu; Takeda, Tomoko; Fujita,

Shinichi; Moki, Keiko

PATENT ASSIGNEE(S): Ajinomoto Co., Inc., Japan; et al.

PCT Int. Appl., 158 pp. SOURCE:

CODEN: PIXXD2 DOCUMENT TYPE: Patent

Japanese LANGUAGE: FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	rent :	NO.			KIN	D	DATE		i	APPL	ICAT	ION 1	NO.		D	ATE	
MO	2003	 0185	38		A1	-	2003	0306	1	WO 2	002-	JP88	09		2	0020	830
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	ВG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,
		UA,	ŪĠ,	US,	UZ,	VC,	VN,	ΥU,	ZA,	ZM,	ZW,	AM,	ΑZ,	BY,	KG,	KZ,	MD,
		RU,	TJ,	\mathbf{TM}													
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑT,	BE,	BG,
		CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,
		PT,	SE,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,
		NΕ,	SN,	TD,	TG												
US	2004	1671	18		A1		2004	0826	1	US 2	004-	7871	75		2	0040	227
PRIORIT	RIORITY APPLN. INFO.:								,	JP 2	001-	2637	18	i	A 2	0010	831
									,	JP 2	002-	1438'	7	1	A 2	0020	123
									,	JP 2	002-	1110	67		A 2	0020	412
									1	WO 2	002-	JP88	09		A1 2	0020	830

OTHER SOURCE(S): MARPAT 138:221602

GI

$$R^{1}$$
 R^{2}
 R^{2}
 R^{5}
 R^{6}
 R^{5}
 R^{6}
 R^{5}
 R^{6}
 R^{7}
 R^{7}
 R^{8}
 R^{8}

The title compds. I [A represents CH:CH, etc.; a, b, c, and d each AB

represents CH, etc.; R1, R2, R3, R4, R5, and R6 each represents hydrogen, etc.; V-W represents C:C, etc.; A1 is (CH2)n; n is 0 to 3; Y1 represents oxygen, etc.; B represents (CH2)vCHR21 (v is 0 to 3 and R21 represents hydrogen, lower alkyl, etc.), etc.; G represents CO, a covalent bond, etc.; A2 is (CH2)m; m is 0 to 6; and R7 and R8 each represents hydrogen, lower alkyl, COR18a, COOR20 (R18a and R20 each represents lower alkyl, etc.), etc.] are prepared I are selective N-type calcium channel antagonists. In an in vitro test, compds. of this invention at 10 μM gave 67% to 85% antagonism of N-type calcium channel.

IT 500894-75-7P 500894-93-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of diarylalkene and diarylalkane derivs. as N-type calcium channel inhibitors)

RN 500894-75-7 HCAPLUS

CN Piperidine, 4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-[[[[(1,1-dimethylethyl)amino]carbonyl]amino]acetyl]- (9CI) (CA INDEX NAME)

RN 500894-93-9 HCAPLUS

CN Piperidine, 4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1[[[(dimethylamino)carbonyl]amino]acetyl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 10 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2003:76556 HCAPLUS

DOCUMENT NUMBER:

138:131125

TITLE:

Fat accumulation-modulating compounds

INVENTOR(S):

Stevenson, Michael John; Leighton, Harry Jefferson

PATENT ASSIGNEE(S):

Adipogenix, Inc., USA PCT Int. Appl., 96 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATE	ENT N	Ю.			KIN	D	DATE			APPL	ICAT:	I NOI	. 00		D	ATE	
						-											
WO 2	20030	0788	88		A2		2003	0130	1	WO 2	002-1	JS232	295		20	0020	722
WO 2	20030	0788	38		A3		2003	1127									
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PL,
		PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	\$L,	TJ,	TM,	TN,	TR,	TT,	TZ,	UA,
		UG,	UZ,	VN,	YU,	ZA,	ZM,	ZW									
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	SK,	TR,	BF,	ВJ,	CF,
		CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG			
US 2	US 2003144350				A1		2003	0731	•	US 2	002-2	2015	88		20	0020	722
PRIORITY APPLN. INFO.:				. :					•	US 2	001-3	30683	37P		P 20	010	720
OTHER SOU	THER SOURCE(S):					PAT	138:	1311:	25								
GI																	

The present invention pertains to compds. effective at modulating fatty AB acid or triglyceride ("fat") accumulation by cells, such compds. having therapeutic potential as regulators of body mass and for the treatment of overweight individuals, obesity, and metabolic disorders. An example compound is I and protocol for high-throughput screening of compound efficacy on human preadipocytes is given. Therapeutic methods and pharmaceutical compns. featuring these compds. are also provided.

IT 292627-89-5 491868-37-2 491868-38-3

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(fat accumulation-modulating compds.)

RN 292627-89-5 HCAPLUS

CN Piperazine, 1-[2-[[[(2,6-dimethylphenyl)amino]carbonyl]amino]-1-oxopropyl]' 4-(diphenylmethyl)- (9CI) (CA INDEX NAME)

RN 491868-37-2 HCAPLUS

CN Piperazine, 1-[2-[[[(4-chlorophenyl)amino]carbonyl]amino]-3-(1H-indol-3-yl)-1-oxopropyl]-4-(diphenylmethyl)- (9CI) (CA INDEX NAME)

RN 491868-38-3 HCAPLUS

CN Piperazine, 1-[2-[[[(3,4-dichlorophenyl)amino]carbonyl]amino]-3-(1H-indol-3-yl)-1-oxopropyl]-4-(diphenylmethyl)- (9CI) (CA INDEX NAME)

L12 ANSWER 11 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:489403 HCAPLUS

DOCUMENT NUMBER: 135:92659

Preparation of carboxamide diazepin derivatives and TITLE:

their inhibition of cathepsin K, cathepsin B, and

Bhatnagar, Neerja; Mauger, Jacques INVENTOR(S):

Aventis Pharma S.A., Fr. PATENT ASSIGNEE(S): SOURCE: PCT Int. Appl., 231 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent French

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	PATENT NO.				KINI)	DATE			API	PLI	CAT	ION I	NO.		•	DATE	
	2001																 20001	.221
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																	, LR,	
		LV,	MA,	MG,	MK,	MN,	MX,	NO,	NZ,	ΡI	٠, د	RO,	SG,	SI,	SK,	TT	, UA,	US,
		UZ,	VN,	YU,	ZA,	AM,	ΑZ,	BY,	KG,	KZ	Ζ,	MD,	RU,	ТJ,	TM			
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ	Ζ,	TZ,	UG,	ZW,	AT,	BE	, CH,	CY,
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		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GW,	MI	٠,	MR,	NE,	SN,	TD,	TG		
FR	2802	927			A1		2001	0629		FR	19	99-	1656	7			19991	.228
FR	2802	927			В1		2002	0301										
CA	2395	275			AA		2001	0705		CA	20	00-3	2395	275			20001	221
EP	1246	824								ΕP	20	00-	9900	87			20001	221
EP	1246	824			B1		2004	0609										
	R:	ΑT,	ΒE,	CH,	DE,	DK,	ES,	FR,	GB,	GF	₹,	IT,	LI,	LU,	NL,	SE	, MC,	PT,
							RO,											
BR	2000	0168	45		Α		2002	1015		BR	20	00-	1684	5			20001	.221
JP	2003	5191	52		T2		2003	0617		JP	20	01-	5494	00			20001	.221
EE	2002 2687	0036	2		Α		2003	0815		$\mathbf{E}\mathbf{E}$	20	02-3	362				20001	221
AT	2687	75			E		2004	0615		ΑT	20	00-	9900	87			20001	.221
PT	1246	824			т												20001	
ES	2218 7805	275			Т3		2004			ES	20	00-	9900	87			20001	
		22			В2		2005							8			20001	
	5198	84			Α		2005			NZ	20	00-	5198	84			20001 20020	.221
	2002									ИО	20	02-	3107				20020	627
	2002																	
	2003				A1		2003	0529									20020	
PRIORIT	Y APP	LN.	INFO	.:													19991	
		<i>(~</i>)						0045	_	WO	20	00-1	FR36	22		W	20001	221
OTHER S	OURCE	(S):			MAR	PAT	135:	9265	9									

GΙ

The title compds. I [R1 = C(O), R5, SO2R5, C(O)NR6R5; R2 and R7 are such AΒ that either R7 represents a hydrogen atom and R2 is such that the group

(a) represents the radical of a natural or nonnatural amino acid, or R2 and R7 form together a cycle with the nitrogen and carbon atom whereto they are bound; R3 = CH:N2 or CH2LR4, R4 represents in particular a linear or branched alkyl radical], inhibitors of cathepsin K, cathepsin B, and papain, were prepared E.g., 3-[9(S)-benzoylamino-6,10-dioxo-1,2,3,4,7,8,9,10-octahydro-6H-pyridazino[1,2-a][1,2]diazepine-1(S)-carboxamide]-5-methyl-1-benzoyloxyhexane-2-one was prepared 348102-13-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of carboxamide diazepin derivs. and their inhibition of cathepsin K, cathepsin B, and papain)

RN 348102-13-6 HCAPLUS

IT

CN

6H-Pyridazino[1,2-a][1,2]diazepine-1-carboxamide, 9[[(cyclohexylamino)carbonyl]amino]-N-[(1S)-1-[[4-(diphenylmethyl)-1piperazinyl]acetyl]-3-methylbutyl]octahydro-6,10-dioxo-, (9S)- (9CI) (CFINDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 12 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2001:115118 HCAPLUS

DOCUMENT NUMBER:

134:163065

TITLE:

Preparation of hydroxamic acid and N-formyl

hydroxylamine derivatives as antibacterial agents

INVENTOR(S):

Pratt, Lisa Marie; Keavey, Kenneth Noel; Pain, Gilles

Denis; Mounier, Laurent Franck

PATENT ASSIGNEE(S):

British Biotech Pharmaceuticals Limited, UK

SOURCE:

PCT Int. Appl., 101 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

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WO 2000-GB3078
     WO 2001010834
                          A2
                                20010215
                                                                    20000810
     WO 2001010834
                          A3
                                20010628
            AE, AU, BR, BY, CA, CN, CZ, DZ, EE, GB, GE, HU, ID, IL, IN, IS,
             JP, KE, KR, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, US, VN, ZA, ZW
         RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE
     CA 2379061
                          AA
                                20010215
                                            CA 2000-2379061
                                                                    20000810
     EP 1202968
                          A2
                                20020508
                                            EP 2000-949820
                                                                    20000810
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, FI, RO, CY
                                20020611
     BR 2000013112
                          Α
                                            BR 2000-13112
                                                                    20000810
     TR 200200360
                          T2
                                20020621
                                            TR 2002-200200360
                                                                    20000810
                          T2
     JP 2003506438
                                20030218
                                            JP 2001-515301
                                                                    20000810
                          В2
                                            AU 2000-63080
     AU 766881
                                20031023
                                                                    20000810
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                          Α
                                20040924
                                            NZ 2000-517239
                                                                    20000810
                          Α
                                            ZA 2002-1093
     ZA 2002001093
                                20030507
                                                                    20020207
                                            NO 2002-621
                          Α
                                20020409
     NO 2002000621
                                                                    20020208
                          В1
                                20050125
                                            US 2002-49131
     US 6846825
                                                                    20020710
     US 2005065095
                          A1
                                20050324
                                            US 2004-953788
                                                                    20040930
PRIORITY APPLN. INFO.:
                                            GB 1999-18869
                                                                A 19990810
                                            GB 1999-27093
                                                                A 19991116
                                            WO 2000-GB3078
                                                                W 20000810
                                            US 2002-49131
                                                                A3 20020710
OTHER SOURCE(S):
                         MARPAT 134:163065
     Selected compds. QCH(R1)CH(R2)C(O)A (I) and pharmaceutical and veterinary
     compns. comprising such compds. are antibacterial agents with respect to a
     range of Gram-pos. and Gram-neg. organisms. In I, Q = -N(OH)C(O)H or
     -C(0)NH(OH); R1 = H, C1-C6 alkyl or C1-C6 alkyl substituted by \geq
     halogen atoms, or, except when Q is -N(OH)C(O)H, hydroxy, C1-C6 alkoxy,
     C1-C6 alkenyloxy, amino, C1-C6 alkylamino, or di-(C1-C6 alkyl)amino; R2 =
     substituted or unsubstituted C1-C6 alkyl, cycloalkyl(C1-C6 alkyl) - or
     aryl(C1-C6 \ alkyl)-; and A = -NHCHR4C(0)NR5R6 or -NR5R6, wherein R4 = side
     chain of a natural or non-natural \alpha-amino acid, and R5 and R6 when
     taken together with the N atom to which they are attached form a saturated
     heterocyclic 1st ring of 5 to 7 atoms (piperidine and piperazine in the
     examples). In general, the compds. of the examples are more active
     against the Gram pos. S. capitis than the Gram neg. E. coli. Test results
     are also reported for 2R-cyclopentylmethyl-3-(formylhydroxyamino)-N-(1S-{4-
     [4-(4-hydroxypiperidine-1-carbonyl)phenoxy]piperidine-1-carbonyl}-2,2-
     dimethylpropyl)propionamide against certain respiratory tract pathogens.
     Although the methods of preparation are not claimed, .apprx.95 example prepns.
     are included.
     325795-44-6P, 2R-[(Formylhydroxyamino)methyl]hexanoic acid
IT
     [1S-(4-benzhydrylpiperazine-1-carbonyl)-2,2-dimethylpropyl]amide
     325795-58-2P, N-[2R-(4-Benzhydrylpiperazine-1-carbonyl)hexyl]-N-
     hydroxyformamide 325795-62-8P, N-(2R-{4-[(4-
     Chlorophenyl)phenylmethyl]piperazine-1-carbonyl}hexyl)-N-hydroxyformamide
     325795-74-2P, N-(2R-{4-[Bis(4-fluorophenyl)methyl]piperazine-1-
     carbonyl}hexyl)-N-hydroxyformamide
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (preparation of hydroxamic acid and N-formyl hydroxylamine derivs. as
        antibacterial agents)
RN
     325795-44-6 HCAPLUS
     Hexanamide, N-[(1S)-1-[[4-(diphenylmethyl)-1-piperazinyl]carbonyl]-2,2-
CN
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Absolute stereochemistry.

NAME)

dimethylpropyl]-2-[(formylhydroxyamino)methyl]-, (2R)- (9CI) (CA INDEX

RN 325795-58-2 HCAPLUS

CN Piperazine, 1-(diphenylmethyl)-4-[(2R)-2-[(formylhydroxyamino)methyl]-1-oxohexyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 325795-62-8 HCAPLUS

CN Piperazine, 1-[(4-chlorophenyl)phenylmethyl]-4-[(2R)-2-[(formylhydroxyamino)methyl]-1-oxohexyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 325795-74-2 HCAPLUS

CN Piperazine, 1-[bis(4-fluorophenyl)methyl]-4-[(2R)-2-[(formylhydroxyamino)methyl]-1-oxohexyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

MO	5142	0.1			Α		2003	0725	ν.	יינ	200	۸ - ۵	142	91			2000	0 2	22
												-	260						
EP	1418		חת	CIT	A1		2004					-			NTT		2000		
	R:	-		•	DE,		•				•	Т,	ы,	ьu,	ИL,	SE	, MC	,	PT,
		•	SI,	LT,	LV,		•		•										
	1528				A		2004					_		8226			2000		
	2794		_		E		2004						122	74			2000		
	2004		1		Α		2004				200						2000		-
	2241				C2		2004						290				2000		
	2004		9		T2		2005							0177	9		2000		-
ES	2231	164			Т3		2005	0516	E	ES	200	0 - 9	122	74			2000	03	23
Lus	6894	059			B1		2005	0517	Ü	JS	200	1-9	376	6 7			2000	03	23
UUS	6451	801			B1		2002	0917	U	JS	200	0 - 5	349	47			2000	03	24
ZA	2001	00764	12		Α		2002	0917	Z	ZΑ	200	1-7	642				2001	09	17
BG	1059	09			Α		2002	0531	Е	3G	200	1-1	059	09			2001	09	18
NO	2001	00464	8		A		2001	1122	N	10	200	1-4	648				2001	09	25
HK	1041	880			A1		2005	0218	H	łΚ	200	2-1	035	56			2002	05	11
US	2003	22034	17		A1		2003	1127	υ	JS	200	2-2	423	46			2002	09	12
∵ os	6797	713			B2		2004	0928											
√ US	6686	502			В1		2004	0203	Ü	JS	200	3 - 3	8622	26			2003	03	11
US	2004	04887	75		A1		2004	0311	Ü	JS	200	3-6	371	53			2003	08	80
	2004				Α		2001	1122	N	10	200	4-2	861				2004	07	06
JP	2005	0021	L8		A2		2005	0106	J	JΡ	200	4 - 2	049	39			2004	07	12
PRIORITY	APP	LN.	NFO	. :					U	JS	199	9-1	265	21P		P	1999	03	26
									C	'A	200	0-2	3680	090		A.3	2000	03	23
													122				2000		
									· J	ΙP	200	0-6	079	98			2000	_	-
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									_	-				16			2002		
OMITTED CO	VID OF	/C) .			MADD	7 (17)	122.4	2017	_	, ,	200			. •	•		2002	•	

OTHER SOURCE(S):

MARPAT 133:281798

GΙ

$$\begin{array}{c|c} X & Q & \\ R^2 & G - G^1 & NY_mW \\ & & & \\ X^1 & & & I \end{array}$$

AB Title compds. [I; X, X1 = H, halo, alkyl, alkenyl, alkynyl, alkoxy, CF3,
 etc.; GG1 = CHN, CHCH, C:C; D = CH, N; R1, R2 = H; R1R2 = (CH2)n; n = 0-3;
 m = 0, 1; Y = L1, L2VZtL3; t = 0, 1; L1 = (heteroatom-interrupted)
 alkylene, alkenylene, alkynylene; L2 = L1, bond, L4Q1, etc.; L3, L4 = L1,
 bond; V = divalent arene, heteroarene, divalent saturated heterocycle; Z =
 A1NOM1CONR10R11, etc.; Q, Q1 = H, ACO2R6, ACONR6R7; W = N(OM)CONR8R9,
 NR8CON(OM)R9, etc.; A, A1 = bond, alkylene, alkenylene, alkynylene, etc.;
 R6-R11 = H, (heteroatom-interrupted) alkyl, alkenyl, alkynyl, aryl, etc.;
 M, M1 = H, pharmaceutically acceptable cation, metabolically cleavable
 group; with provisos], were prepared Thus, (R)-[(4-

L12 ANSWER 13 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:707152 HCAPLUS

DOCUMENT NUMBER: 133:281798

TITLE: Preparation of diphenylmethylpiperazinylhydroxyureas

and related compounds for treatment of asthma, allergy

and inflammation.

INVENTOR(S): Scannel, Ralph; Chatelain, Pierre; Toy-Palmer, Anna;

Differding, Edmond; Ellis, James; Lassoie,

Marie-Agnes; Young, Michelle; Cai, Xiong; Hussoin,

Sajjat; Grewal, Gurmit; Lewis, Timothy

PATENT ASSIGNEE(S): UCB, S.A., Belg.

SOURCE: PCT Int. Appl., 64 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

									APPLICATION NO.							ATE		
WO	2000	0582	95		A2	:	2000	1005								0000	323	
	W:	CU, ID,	CZ,	DE, IN,	DK, IS,	DM, JP,	DZ, KE,	EE, KG,	ES, KP,	FI, KR,	BG, GB, KZ, NZ,	GD, LC,	GE, LK,	GH, LR,	GM, LS,	HR, LT,	HU, LU,	
	RW:	SG, GH, DK,	SI, GM, ES,	SK, KE, FI,	SL, LS, FR,	TJ, MW, GB,	TM, SD, GR,	TR, SL, IE,	TT, SZ, IT,	TZ, TZ, LU,	UA, UG, MC,	UG, ZW, NL,	US, AT, PT,	UZ, BE,	VN, CH,	YU, CY,	ZA, DE,	ZW
CA	2368 2471	090 984	·	·	AA AA	:	2000: 2000:	1005 1005		CA 2 CA 2	000-	2368 2471	090 984		20	0000	323	
	1165 1165									EP 2	000-	9122'	74		20	0000:	323	
	R:	•	•		DE, LV,		•	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
	2000															0000		
							20020422				001-					0000: 0000:		
EE	2001	0049	8		Α	:	20021126 JP 2000-607998 20021216 EE 2001-498 20030605 AU 2000-34105							2	0000: 0000:	323		

chlorophenyl)phenylmethyl]piperazine, 4-(2-bromoethoxy)benzyl alc. (preparation given), and Et3N were stirred in CH2Cl2 at 50° to give 94.1% 4-[2-[4-[(1R)-(4-chlorophenyl)phenylmethyl]piperazinyl]ethoxy]benzyl alc. This was stirred with PhO2CNHOCO2Ph, Ph3P, and diisopropylazodicarboxylate in THF at 0° to room temperature to give 78.4% N-[[4-[2-[4-[(1R)-(4-chlorophenyl)phenylmethyl]piperazinyl]ethoxy]phenyl]methyl]phenoxycarbonyl aminophenoxyformate. The latter was stirred with NH3 in MeOH to give 73.2% N-[[4-[2-[4-[(1R)-(4-chlorophenyl)phenylmethyl]piperazinyl]ethoxy]phenyl]methyl]amino-N-hydroxyamide. This bound to human H1 receptors with Ki = 24 nM.

IT 299460-30-3P 299460-31-4P 299460-39-2P 299460-40-5P 299460-41-6P 299460-43-8P 299460-44-9P 299460-45-0P 299460-46-1P 299460-47-2P 299460-50-7P 299460-54-1P 299460-56-3P 299460-65-4P 299460-74-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of diphenylmethylpiperazinylhydroxyureas and related compds. for treatment of asthma, allergy and inflammation)

RN 299460-30-3 HCAPLUS

CN Urea, N-[4-[4-[(R)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]-2-butynyl]-N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 299460-31-4 HCAPLUS

CN Urea, N-[4-[4-(8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)-1-piperidinyl]-2-butynyl]-N-hydroxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$

RN 299460-39-2 HCAPLUS

CN Acetic acid, [2-[4-[[4-[[(aminocarbonyl)hydroxyamino]methyl]phenyl]phenylmethyl]-1-piperazinyl]ethoxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 299460-40-5 HCAPLUS

CN Acetic acid, [2-[4-[4-[4-[(aminocarbonyl)hydroxyamino]-1-butynyl]phenylmethyl]-1-piperazinyl]ethoxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

$$\begin{array}{c} C \\ \text{t-BuO-C-CH}_2\text{-O-CH}_2\text{-CH}_2 \\ \hline \\ N \\ \hline \end{array} \begin{array}{c} \text{Ph} \\ \text{C} \\ \hline \end{array} \begin{array}{c} \text{C-CH}_2\text{-CH}_2\text{-N} \\ \hline \end{array}$$

PAGE 1-B

RN 299460-41-6 HCAPLUS

CN Urea, N-[4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]-2-butynyl]-N-hydroxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & \text{HO} & \text{O} \\ & & & \text{HO} & \text{O} \\ & & & & \text{I} \\ & & & \text{CH}_2\text{--}\text{C} = \text{C}\text{--}\text{CH}_2\text{--}\text{N}\text{--}\text{C}\text{--}\text{NH}_2 \\ \end{array}$$

RN 299460-43-8 HCAPLUS

CN Urea, N-[2-[2-[4-[(4-chlorophenyl)phenylmethyl]-1-piperazinyl]ethoxy]ethyl]-N-hydroxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{HO} & \text{O} \\ & | & | \\ & \text{Ph} \\ & \text{CH-} & \text{N} \end{array}$$

RN 299460-44-9 HCAPLUS

CN Urea, N-[4-[4-[(R)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]butyl]-N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$\begin{array}{c|c} & \text{Ph} \\ & \text{OH} \\ & \text{N} \\ & \text{COH}_2) \stackrel{4}{\cancel{4}} \end{array}$$

RN 299460-45-0 HCAPLUS

CN Acetic acid, [2-[4-[[4-[[(aminocarbonyl)hydroxyamino]methyl]phenyl]phenylmethyl]-1-piperazinyl]ethoxy]-, dihydrochloride (9CI) (CA INDEX NAME)

●2 HCl

RN 299460-46-1 HCAPLUS

CN Acetic acid, [2-[4-[4-[(aminocarbonyl)hydroxyamino]-1-butynyl]phenylmethyl]-1-piperazinyl]ethoxy]-, dihydrochloride (9CI) (CA INDEX NAME)

2 HCl

PAGE 1-B

— NH₂

299460-47-2 HCAPLUS RN Urea, N-[2-[2-[4-[(R)-(4-chlorophenyl)phenylmethyl]-1-CN piperazinyl]ethoxy]ethyl]-N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$\begin{array}{c|c} & \text{Ph} \\ & \text{OH} \\ & \text{N} \end{array}$$

299460-50-7 HCAPLUS RN

Urea, N-[2-[4-[(S)-(4-chlorophenyl)phenylmethyl]-1-CNpiperazinyl]ethoxy]ethyl]-N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN

299460-54-1 HCAPLUS Acetic acid, [2-[4-[[4-[(aminocarbonyl)hydroxyamino]-1-CN butynyl]phenyl]phenylmethyl]-1-piperazinyl]ethoxy]-, bis(trifluoroacetate)

(salt) (9CI) (CA INDEX NAME)

CM 1

CRN 299460-53-0 CMF C26 H32 N4 O5

PAGE 1-B

— ин₂

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN

299460-56-3 HCAPLUS

CN Acetic acid, [2-[4-[[4-[[(aminocarbonyl)hydroxyamino]methyl]phenyl]phenylmethyl]-1-piperazinyl]ethoxy]-, bis(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 299460-55-2 CMF C23 H30 N4 O5

$$HO_2C-CH_2-O-CH_2-CH_2$$
 N
 Ph
 $CH_2-N-C-NH_2$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 299460-65-4 HCAPLUS

CN Glycine, N-[4-[4-[(aminocarbonyl)hydroxyamino]-1-butynyl]phenyl]-N-[[4-[(R)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]acetyl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$H_2N$$
 N
 R
 EtO
 O
 N
 R

PAGE 1-B

__c1

RN 299460-74-5 HCAPLUS

CN 1-Piperazinebutanoic acid, β-[[[4-[4-[(aminocarbonyl)hydroxyamino]-1-butynyl]phenyl]methyl]amino]-4-[(4-chlorophenyl)phenylmethyl]-, ethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

O OH

$$H_2N-C-N-CH_2-CH_2-C=C$$
 $EtO-C-CH_2$
 $CH_2-NH-CH-CH_2-N$

Ph

 $CH_2-NH-CH-CH_2-N$

PAGE 1-B

L12 ANSWER 14 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2000:706352 HCAPLUS

DOCUMENT NUMBER:

133:276324

TITLE:

Inhibitors of cellular nicotinamide mononucleotide formation, therapeutic use thereof, and identification

and metabolic methods

INVENTOR(S):

Biedermann, Elfi; Eisenburger, Rolf; Hasmann, Max; Loser, Roland; Rattel, Benno; Reiter, Friedemann; Schein, Barbara; Schemainda, Isabel; Schulz, Michael;

Seibel, Klaus; Vogt, Klaus; Wosikowski, Katja

PATENT ASSIGNEE(S):

Klinge Pharma G.m.b.H., Germany

SOURCE:

Ger. Offen., 20 pp.

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19908483	A1	20001005	DE 1999-19908483	19990226
PRIORITY APPLN. INFO.:			DE 1999-19908483	19990226

AB Biol. active substances are described which inhibit the cellular formation of NMN, an essential intermediate in NAD(P) biosynthesis in the cell. These substances can be used for a pharmaceutical composition for the treatment of cancer, leukemia, or for Immunosuppression. Addnl., methods are described for the identification of such substances and for the investigation of a given cell type for its dependence on nicotinamide as a precursor in NAD synthesis.

299400-58-1 IT

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(NMN formation inhibitors, therapeutic use thereof, and identification and metabolic methods)

RN 299400-58-1 HCAPLUS

CN 1-Piperazinecarboxamide, 4-(diphenylmethyl)-N-[6-[[[(3-

pyridinylmethyl)amino]carbonyl]amino]hexyl]- (9CI) (CA INDEX NAME)

2

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 15 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN 1999:757952 HCAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 132:117085 Synthesis and SAR of Adatanserin: Novel Adamantyl TITLE: Aryl- and Heteroarylpiperazines with Dual Serotonin 5-HT1A and 5-HT2 Activity as Potential Anxiolytic and Antidepressant Agents Abou-Gharbia, Magid A.; Childers, Wayne E., Jr.; AUTHOR (S): Fletcher, Horace; McGaughey, Georgia; Patel, Usha; Webb, Michael B.; Yardley, John; Andree, Terrance; Boast, Carl; Kucharik, Robert J.; Marquis, Karen; Morris, Herman; Scerni, Rosemary; Moyer, John A. Chemical Sciences and CNS Disorders, Wyeth-Ayerst CORPORATE SOURCE: Research, Princeton, NJ, 08543-8000, USA Journal of Medicinal Chemistry (1999), 42(25), SOURCE: 5077-5094 CODEN: JMCMAR; ISSN: 0022-2623 PUBLISHER: American Chemical Society DOCUMENT TYPE: Journal English LANGUAGE: CASREACT 132:117085 OTHER SOURCE(S): Several novel functionalized adamantyl aryl- and heteroarylpiperazine derivs. were prepared and examined in various receptor binding and behavioral tests to determine their serotonin receptor activities. Many compds. demonstrated modest to high affinity for 5-HT1A receptors. 2-[4-(2-Pyrimidinyl)-1-piperazinyl]ethyl adamantyl-1-carboxylate demonstrated relatively high affinity for 5-HT1A receptors (Ki = 8 nM) and acceptable selectivity vs. D2 receptors (Ki = 708 mM); however, it lacked in vivo activity in serotonergic behavioral models. In contrast, WY-50,324 (SEB-324, adatanserin) (adamantyl-1-carboxylic acid 2-[4-(2-pyrimidinyl)-1-piperazinyl]ethylamide) (I) and adamantyl-1-carboxylic acid 2-[4-(2-methoxyphenyl)-1piperazinyl]ethylamide demonstrated high affinity for 5-HT1A binding sites (Ki = 1 nM for both) and moderate affinity for 5-HT2 receptors (Ki = 73)and 75 nM, resp.). Both compds. also demonstrated partial 5-HT1A agonist activity in vivo in rat serotonin syndrome and 5-HT2 antagonist activity in quipazine- and DOI-induced head shake paradigms. The selective 5-HT1A partial agonist and 5-HT2 antagonist activity of I was accompanied by significant anxiolytic activity in an animal conflict model. On the basis of this profile, compound 9 entered development as a combined anxiolytic and antidepressant agent. 256351-94-7P TΤ RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process) (synthesis and SAR of adatanserin by preparation of novel adamantyl and aryl- and heteroarylpiperazines with dual serotonin 5-HT1A and 5-HT2

CN Urea, N-[2-[4-[bis(4-chlorophenyl)methyl]-1-piperazinyl]ethyl]-N'-tricyclo[3.3.1.13,7]dec-1-yl-, dihydrochloride (9CI) (CA INDEX NAME)

256351-94-7 HCAPLUS

RN

activity as potential anxiolytic and antidepressant agents)

●2 HCl

REFERENCE COUNT: 85 THERE ARE 85 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 16 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1999:690954 HCAPLUS

DOCUMENT NUMBER:

131:307106

TITLE:

Use of vitamin PP compounds as cytoprotective agents

in chemotherapy

INVENTOR(S):

Biedermann, Elfi; Hasmann, Max; Loser, Roland; Rattel,

Benno; Reiter, Friedemann; Schein, Barbara; Schemainda, Isabel; Seibel, Klaus; Vogt, Klaus;

Wosikowski, Katja

PATENT ASSIGNEE(S):

Klinge Pharma GmbH, Germany

SOURCE: PCT Int. Appl., 145 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	CENT	NO.			KIN	D :	DATE		,					DATE				
						_									-			
WO	9953	920			A1		1999:	1028		WO 1:	999-	EP26	86		1	9990	421	
	W:	ΑE,	AL,	AM,	ΑT,	ΑU,	ΑZ,	ВA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	
		DE,	DK,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	ΗU,	ID,	ΙL,	IN,	ıs,	
		JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	
		MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	
		TM,	TR,	TT,	UA,	ŪĠ,	US,	UΖ,	VN,	ΥU,	ZA,	ZW						
	RW:	GH,	GM,	KΕ,	LS,	MW,	SD,	SL,	SZ,	ŪĠ,	ZW,	ΑT,	BE,	CH,	CY,	DE,	DK,	
		ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	
		CI,	CM,	GΑ,	GN,	GW,	GW, ML, MR, NE, SN, TD, TG											
DE	1981	8044			A1		19991028 DE 1998-19818044 19980422											
EP	1031	564			A1		2000	0830		EP 1:	999-	1038	14		1	9990	226	
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		ΙE,	SI,	LT,	LV,	FI,	RO											
ΑU	9939	282			A1		1999	1108		AU 1	999-	3928	2		1:	9990	421	
ΕP	1079	832			A1		2001	0307		EP 1	999-	9221	19		1:	9990	421	
	R:	AT,	ВĒ,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙT,	LI,	LU,	NL,	SE,	PT,	ΙE,	FI
JP	2002	5121	90		T2	2 20020423 JP 2000-544324 19990421												
AT	3111	86			E	20051215 AT 1999-922119 19990421												
WO	2000	0503	99		A1		2000	0831		WO 2	000-	EP16:	28		2	0000	228	

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG EP 1154998 A1 20011121 EP 2000-907642 20000228 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO JP 2002537380 T2 20021105 JP 2000-600982 20000228 US 2002160968 **A**1 20021031 US 2001-935772 20010823 US 6506572 B2 20030114 PRIORITY APPLN. INFO.: DE 1998-19818044 19980422 Α EP 1999-103814 19990226 Α WO 1999-EP2686 W 19990421 WO 2000-EP1628 W 20000228

OTHER SOURCE(S): MARPAT 131:307106

The invention relates to the use of vitamin PP compds. and/or compds. with anti-pellagra activity such as for example nicotinic acid (niacin), and nicotinamide (niacin-amide, vitamin PP, vitamin B3) for the reduction, elimination or prevention of side-effects of different degrees as well as for neutralization of acute side-effects in immunosuppressive or cancerostatic chemotherapy or diagnosis, especially with substituted pyridine carboxamides, as well as combination medicaments with an amount of compds. with vitamin B3 and/or anti-pellagra activity and chemotherapeutic agents are especially considered in the mentioned chemotherapies and indications. Nicotinamide at 500 mg/kg twice daily protected mice treated i.p. with antitumor N-[4-(1-diphenylmethylpiperidin-4-yl)butyl]-3-(pyridin-3-yl)propionamide. There were no deaths in the nicotinamide-treated mice and the strong reduction of leukocytes was completely prevented.

IT 227775-37-3

RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(vitamin PP compds. as cytoprotective agents in chemotherapy)

RN 227775-37-3 HCAPLUS

CN 2-Propenamide, N-[3-[4-(diphenylmethyl)-1-piperazinyl]propoxy]-3-(3-pyridinyl)- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 17 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:404932 HCAPLUS

DOCUMENT NUMBER: 131:58849

TITLE: New piperazinyl-substituted pyridylalkane, -alkene,

and -alkyne carboxamides, with antitumor and

immunosuppressive activities

INVENTOR(S): Biedermann, Elfi; Hasmann, Max; Loser, Roland; Rattel,

Benno; Reiter, Friedemann; Schein, Barbara; Seibel,

Klaus; Vogt, Klaus; Wosikowski, Katja

PATENT ASSIGNEE(S): Klinge Pharma G.m.b.H., Germany

SOURCE:

PCT Int. Appl., 224 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA'	PATENT NO.															ATE	
WO											1998-						
	W:										, BY,						
											, HU,						
		KG,	ΚP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT	, LU,	LV,	MD,	MG,	MK,	MN,	MW,
		MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE	, SG,	SI,	SK,	SL,	ТJ,	TM,	TR,
		TT,	UA,	ŪĠ,	US,	UZ,	VN,	ΥU,	zw								
	RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SZ,	ŪĠ,	zw	, AT,	BE,	CH,	CY,	DE,	DK,	ES,
		FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL	, PT,	SE,	BF,	ВJ,	CF,	CG,	CI,
							MR,										
DE	1975	6236			A1		1999	0701		DE :	1997-	1975	6236		1	9971	217
ZA	9811	235			Α		1999	0608		ZA	1998-	1123	5		1	9981	208
AU	9920	543			A1		1999	0705		AU	1999-	2054	3		1	9981	216
EP	1060	163			A1		2000	1220		EP	1998-	9652	75		1	9981	216
EP	1060	163			В1		2005	1012									
	R:	AT.	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IT,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,		•	•												
JP	2002	5083	56		T2		2002	0319		JP :	2000-	5389	90		1	9981	216
AT	3064	73			E		2005	1015		AT	1998-	9652	75		1	9981	216
US	6903	118			В1		2005	0607		US :	2000-	5960	01		2	0000	616
PRIORIT											1997-						
111101111										WO	1998-	EP82	68		W 1	9981	216
OTHER S	OURCE	(S):			MAR!	PAT	131:	5884	9								

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The invention relates to new piperazinyl-substituted pyridylalkanoic, AB -alkenoic, and alkynoic acid amides with a saturated or (poly) unsatd.

II

hydrocarbon residue in the carboxylic acid group, and analogs, i.e., having formula I [R1 = H, OH, halo, cyano, CONH2, CO2H, (hetero)aryl, alkoxy, amino, (hetero)aryloxy, etc.; R2 = H, halo, cyano, alkyl, CF3, OH, etc.; or R1R2 = (CH2)4, (CH:CH)2, or CH2OCH2O or its (di)alkyl derivs.; R3 = H, halo, alkyl, CF3, hydroxyalkyl, etc.; R4 = H, OH, alk(en/yn)yl, cycloalkyl, alkoxy, aralkoxy; n = 0, 1; A = (un)substituted alkylene or hetero-isosteres, cycloalkylene, alkenylene, alkadienylene, or ethynylene; D = (un)substituted alkylene, alkenylene, alkynylene, or hetero-isosteres of them; E = (un) substituted (bis) (homo) piperazine bound at the N atoms; G = variety of terminal chains]. Also disclosed are methods for the production of the compds., medicaments containing them, and their production, as well as their therapeutic use, especially as cytostatic agents and immunosuppressive agents, for example, in the treatment or prevention of various types of tumors, and control of immune reactions such as autoimmune diseases. For example, 3-(3-pyridyl)acrylic acid was activated with oxalyl chloride and condensed with O-[3-[4-(diphenylmethyl)piperazin-1-yl]propyl]hydroxylamine to give title compound II. Several representative compds. inhibited various human tumor cells in vitro at low concns., e.g., with IC50 values of 0.1 nM to 10 μM , and also showed immunosuppressive activity against mouse lymphocytes with IC50 values of $0.03-0.09 \mu M$.

IT 227775-37-3P

CN

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(target compound; preparation of piperazinyl-substituted pyridylalkanecarboxamides and analogs as cytostatics and immunosuppressants)

RN 227775-37-3 HCAPLUS

2-Propenamide, N-[3-[4-(diphenylmethyl)-1-piperazinyl]propoxy]-3-(3-pyridinyl)- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 18 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:332965 HCAPLUS

DOCUMENT NUMBER: 131:44643

TITLE: Preparation of phenol derivatives as antioxidants and

ACAT inhibitors

INVENTOR(S): Suzuki, Toshikazu; Ohmizu, Hiroshi; Hashimura,

Yoshitada; Kubota, Hitoshi; Tanaka, Keiko

PATENT ASSIGNEE(S): Tanabe Seiyaku Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 70 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	D.	ATE
				-	
JP 11139969	A2	19990525	JP 1998-220951	1	9980805
PRIORITY APPLN. INFO.:			JP 1997-212376	A 1	9970807

OTHER SOURCE(S):

MARPAT 131:44643

GI

AB The title compds. I [R = H, (un)substituted alkyl, etc.; R1 = (un)substituted alkyl; R2 = (un)substituted alkyl, etc.; OR3= (protected) OH; R4 = H, (un)substituted alkyl, etc.; W = O, etc.; NR5R6 = (mono- or disubstituted) amino, etc.] are prepared The title compound II in vitro showed IC50 of 0.000067 μM against ACAT.

IT 195312-37-9P 195312-64-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

II

(preparation of phenol derivs. as antioxidants and ACAT inhibitors)

RN 195312-37-9 HCAPLUS

CN Urea, N-[3-(1,1-dimethylethyl)-2-hydroxy-5-methoxyphenyl]-N'-[3-[4-(diphenylmethyl)-1-piperazinyl]propyl]- (9CI) (CA INDEX NAME)

RN 195312-64-2 HCAPLUS

CN Urea, N-[3-(1,1-dimethylethyl)-2-hydroxy-5-methoxyphenyl]-N'-[2-[4-(diphenylmethyl)-1-piperazinyl]ethyl]-, dihydrochloride (9CI) (CA INDEX NAME)

•2 HCl

L12 ANSWER 19 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:788775 HCAPLUS

DOCUMENT NUMBER: 130:38702

TITLE: Preparation of thiadiazole derivatives useful for the

treatment of diseases related to connective tissue

degradation

INVENTOR(S):
Jacobsen, Eric J.; Mitchell, Mark A.; Schostarez,

Heinrich J.; Harper, Donald E. Pharmacia & Upjohn Company, USA

PATENT ASSIGNEE(S): Pharmacia & Upjohn Com SOURCE: U.S., 29 pp.

SOURCE: U.S., 29 pp.
CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
				-
US 5847148	Α	19981208	US 1997-835599	19970410
PRIORITY APPLN. INFO.:			US 1997-835599	19970410

OTHER SOURCE(S): MARPAT 130:38702

AB Thiadiazole derivs. RNHC(:X)NHCHR1(CHR3)nCOR2 (R = 4,5-dihydro-5-thioxo-1,3,4-thiadiazol-2-yl; X = 0, S; R1, R3 = H, alkyl, aralkyl, cycloalkylalkyl, alkoxyalkyl, etc.; R2 = OH, alkoxy, aryloxy, amino group; n = 0, 1) were prepared for inhibition of various enzymes from the matrix metalloproteinase family, predominantly stromelysins, and thus are useful for the treatment of matrix metallo endoproteinase diseases. Thus, N-[[(4,5-dihydro-5-thioxo-1,3,4-thiadiazol-2-yl)amino]carbonyl]-L-phenylalanine Me ester, prepared by reaction of L-phenylalanine Me ester hydrochloride with phosgene and 5-amino-1,3,4-thiadiazole-2-thiol, showed Ki = 0.9 μM for inhibition of stromelysin.

IT 198701-11-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of thiadiazole amino acid derivs. for treatment of diseases related to connective tissue degradation)

RN 198701-11-0 HCAPLUS

CN Piperazine, 1-[(2S)-2-[[((4,5-dihydro-5-thioxo-1,3,4-thiadiazol-2-yl)amino]carbonyl]amino]-1-oxo-3-phenylpropyl]-4-(diphenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 20 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:487581 HCAPLUS

DOCUMENT NUMBER: 129:216401

TITLE: Quantitative structure-activity analysis of novel hydroxyphenyl urea derivatives as antioxidants

AUTHOR(S): Nakao, Kazuya; Shimizu, Ryo; Kubota, Hitoshi; Yasuhara, Mikiko; Hashimura, Yoshimasa; Suzuki,

Toshikazu; Fujita, Toshio; Ohmizu, Hiroshi

CORPORATE SOURCE: Lead Generation Research Laboratory, Tanabe Seiyaku

Co., Ltd., Osaka, 532, Japan

SOURCE: Bioorganic & Medicinal Chemistry (1998), 6(6), 849-868

CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

A series of substituted hydroxyphenyl ureas was synthesized, the chemical structure of which was designed based on structures of natural antioxidants, vitamin E (α -tocopherol) and uric acid. They exhibited high inhibitory activity against lipid peroxidn. In order to gain an insight into the mechanism of the inhibition reaction, their structure-activity relationships quant. were examined Electronic and steric effects of substituents on the phenolic hydroxyl group were shown to be of importance in governing the inhibitory potency. An increase in the electron donating property of substituents toward the phenolic hydroxyl group enhanced the antioxidative activity by the stabilization of an electron-deficient radical-type transition state. The steric shielding by ortho-substituents stabilized the phenoxy radicals formed following the transition state. Derivs. having a carboxyl group were only weakly active presumably because of an intermol. ion-dipole interaction of the phenolic hydroxyl group with the carboxylate anion which could retard the formation of the transition state.

IT 195312-37-9P 198756-51-3P 198756-52-4P 212651-71-3P 212651-72-4P 212651-76-8P 212651-78-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and antioxidant structure-activity relationship of hydroxyphenyl urea derivs.)

RN 195312-37-9 HCAPLUS

CN Urea, N-[3-(1,1-dimethylethyl)-2-hydroxy-5-methoxyphenyl]-N'-[3-[4-(diphenylmethyl)-1-piperazinyl]propyl]- (9CI) (CA INDEX NAME)

RN 198756-51-3 HCAPLUS

CN Urea, N-[2-[4-(diphenylmethylene)-1-piperidinyl]ethyl]-N'-(2-hydroxy-5-methoxyphenyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{OMe} \\ & \text{O} \\ & \text{N---} \text{CH}_2\text{---} \text{CH}_2\text{---} \text{NH----} \text{C----} \text{NH----} \\ & \text{OH} \\ & \text{OH} \\ \end{array}$$

RN 198756-52-4 HCAPLUS

CN Urea, N-[2-[4-[bis(4-fluorophenyl)methylene]-1-piperidinyl]ethyl]-N'-(2-hydroxy-5-methoxyphenyl)- (9CI) (CA INDEX NAME)

RN 212651-71-3 HCAPLUS

CN Urea, N-[2-[4-(diphenylmethyl)-1-piperazinyl]ethyl]-N'-(2-hydroxy-5-methoxyphenyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \mathsf{Ph_2CH} & \mathsf{O} \\ \mathsf{N} & \mathsf{CH_2-CH_2-NH-C-NH} \\ \end{array}$$

RN 212651-72-4 HCAPLUS

CN Urea, N-[2-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]ethyl]-N'-(2-hydroxy-5-methoxyphenyl)- (9CI) (CA INDEX NAME)

F OME
$$CH - CH_2 - CH_2 - NH - C - NH$$

$$OH$$

$$OH$$

RN 212651-76-8 HCAPLUS

CN Urea, N-[3-[4-(diphenylmethyl)-1-piperazinyl]propyl]-N'-(2-hydroxy-5-methoxyphenyl)- (9CI) (CA INDEX NAME)

Ph₂CH
$$N$$
 N $CH_2)_3-NH-C-NH$ OH

RN 212651-78-0 HCAPLUS

CN Urea, N-[3-(1,1-dimethylethyl)-2-hydroxy-5-methoxyphenyl]-N'-[2-[4-(diphenylmethyl)-1-piperazinyl]ethyl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 21 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:743743 HCAPLUS

DOCUMENT NUMBER: 128:53200

TITLE: Optical resolution of diphenylpiperazines

INVENTOR(S): Yanagi, Masayuki; Yamada, Koji; Nakamichi, Norihiro;

Takahashi, Motohiko

PATENT ASSIGNEE(S): Pola Chemical Industries, Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09297126	A2	19971118	JP 1996-132694	19960430
JP 3521103	B2	20040419		

PRIORITY APPLN. INFO.: JP 1996-132694 19960430 OTHER SOURCE(S): MARPAT 128:53200

Diphenylpiperazines useful as cardiovascular drugs are treated with aromatic isocyanate compds. to form diastereomers, which are subjected to HPLC with fluorescence detectors for optical resolution 1-[4,4-Bis(4-fluorophenyl)butyl]-4-(2-hydroxy-3-phenylaminopropyl)piperazine (I) 10 mg was reacted with 10 mg (-)-1-(1-naphthyl)ethyl isocyanate (II) at 5° for 72 h and the reaction product was analyzed by HPLC using ODS column with a mobile phase of acetonitrile/phosphate buffer (pH 4) to sep. 2 peaks, which corresponded to a reaction product of (R)-I and (S)-I with II, resp.

IT 198418-21-2P 198418-23-4P

RL: ANT (Analyte); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation)

(optical resolution of diphenylpiperazines via chiral carbamate formation)

RN 198418-21-2 HCAPLUS

CN Carbamic acid, [1-(1-naphthalenyl)ethyl]-, 1-[[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]methyl]-2-[[[[1-(1-naphthalenyl)ethyl]amino]carbonyl]phenylamino]ethyl ester, [1S-[1R*(S*),2(S*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 198418-23-4 HCAPLUS

CN Carbamic acid, [1-(1-naphthalenyl)ethyl]-, 1-[[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]methyl]-2-[[[[1-(1-naphthalenyl)ethyl]amino]carbonyl]phenylamino]ethyl ester, [1R-[1R*(R*),2(R*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L12 ANSWER 22 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1997:731400 HCAPLUS

DOCUMENT NUMBER:

128:3549

TITLE:

Preparation of N-(2,5-dihydroxyphenyl)urea derivatives

having antioxidant and active oxygen-quenching

activities

INVENTOR(S):

Suzuki, Toshikazu; Omizu, Hiroshi; Hashimura,

Yoshimasa; Kubota, Hitoshi; Saito, Keiko

PATENT ASSIGNEE(S):

SOURCE:

Tanabe Seiyaku Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

LANGUAGE:

Patent Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09278737 PRIORITY APPLN. INFO.:	A2	19971028	JP 1997-28583 JP 1996-28843 A	19970213 19960216
OTHER SOURCE(S):	MARPAT	128:3549		

AB The title phenol derivs. (I; R = H, lower alkyl or alkoxy; R1 = lower alkyl; W = O, S, NR5; wherein R5 = H, lower alkyl, aryl, OH, lower alkoxy; R21 = substituted alkyl; R3 = H, (un) substituted lower alkyl; or NR21R3 = N-containing heterocyclyl] and pharmacol. acceptable salts thereof are prepared by reaction of 2,5-dihydroxyaniline derivs. (II; R, R1 = same as above; R4 = protecting group for the HO group) with COCl2 or triphosgene and then with HNR21R3 (R3, R21 = same as above) followed by deprotection. compds. I also possess excellent activities for inhibiting lipid peroxidn., foam cell formation of macrophages, oxidative LDL formation, ACAT, and reperfusion-induced arrhythmia and are reduced in toxicity and thereby are useful for treatment and prevention of arteriosclerosis, ischemic diseases such as cerebral and myocardial infarction, cell damages during ischemia and/or reperfusion, inflammation, and arrhythmia (no data). Thus, a cooled (-78°) solution of COCl2 in CH2Cl2 was added dropwise to a solution of (2-amino-4-methoxyphenoxy) methoxymethane and Et3N in CH2Cl2 and after warming to 0°, the solvent was evaporated under reduced pressure to give a residue. The latter residue was dissolved in CH2Cl2, followed by adding dropwise a solution of 2-(4ethoxycarbonylmethoxyphenyl)ethylamine hydrochloride and Et3N in CH2Cl2, and the resulting mixture was stirred at room temperature for 1 h to give, after

treatment with a mixture of concentrated HCl and EtOH, the title compound (III).

IT 198756-50-2P 198756-51-3P 198756-52-4P 198756-58-0P 198756-59-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-(dihydroxyphenyl)urea derivs. having antioxidant and active oxygen-quenching activities for treatment of diseases)

RN 198756-50-2 HCAPLUS

CN

Urea, N-[2-[4-(diphenylmethyl)-1-piperazinyl]ethyl]-N'-(2-hydroxy-5-methoxyphenyl)-, dihydrochloride (9CI) (CA INDEX NAME)

Ph₂CH
$$N \longrightarrow CH_2 - CH_2 - NH - C - NH \longrightarrow OH$$

•2 HCl

RN 198756-51-3 HCAPLUS

CN Urea, N-[2-[4-(diphenylmethylene)-1-piperidinyl]ethyl]-N'-(2-hydroxy-5-methoxyphenyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 198756-52-4 HCAPLUS

CN. Urea, N-[2-[4-[bis(4-fluorophenyl)methylene]-1-piperidinyl]ethyl]-N'-(2-hydroxy-5-methoxyphenyl)- (9CI) (CA INDEX NAME)

RN 198756-58-0 HCAPLUS

CN Urea, N-[3-[4-(diphenylmethyl)-1-piperazinyl]propyl]-N'-(2-hydroxy-5-methoxyphenyl)-, dihydrochloride (9CI) (CA INDEX NAME)

●2 HCl

RN 198756-59-1 HCAPLUS

CN Urea, N-[2-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]ethyl]-N'-(2-hydroxy-5-methoxyphenyl)-, dihydrochloride (9CI) (CA INDEX NAME)

●2 HCl

L12 ANSWER 23 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:717904 HCAPLUS

DOCUMENT NUMBER: 128:3886

TITLE: Preparation of thiadiazolyl(thio)ureas useful as

matrix metalloprotease inhibitors

INVENTOR(S): Jacobsen, E. Jon; Mitchell, Mark A.; Schostarez,

Heinrich Joseph; Harper, Donald E.

PATENT ASSIGNEE(S): Pharmacia & Upjohn Co., USA; Jacobsen, E. Jon;

Mitchell, Mark A.; Schostarez, Heinrich Joseph;

Harper, Donald E.

SOURCE: PCT Int. Appl., 85 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.				KIND		DATE		APPLICATION NO.						DATE		
					-											
WO 9740031			A1		19971030		WO 1997-US5428					19970410				
W:	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	ВG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,
	DK,	EE,	ES,	FΙ,	GB,	GE,	GH,	HU,	IL,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,
	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,
	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	TJ,	TM,	TR,	TT,	UA,	UG,	US,	UZ.

VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG AU 9726036 Α1 19971112 AU 1997-26036 19970410 EP 900211 19990310 **A1** EP 1997-917801 19970410 EP 900211 20030702 B1 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI JP 2000509039 T2 20000718 JP 1997-538079 19970410 AT 244229 E 20030715 AT 1997-917801 19970410 PT 900211 20031031 PT 1997-917801 19970410 20040401 ES 2202602 Т3 ES 1997-917801 19970410 PRIORITY APPLN. INFO.: US 1996-16003P 19960423 WO 1997-US5428 W 19970410 OTHER SOURCE(S): MARPAT 128:3886

GI

AB Novel thiadiazole derivs. I [X = 0, S; R1 = H, C1-6 alkyl, (CH2)0-4-aryl,(CH2)1-4-cycloalkyl, C1-4 alkyl-OR4, C1-4 alkyl-SR4, (CH2)1-4-heteroaryl, CO2R4, CONR52, (CH2)1-4-OSiR44; R2 = OR5, NR6R7; R3 = H, C1-6 alkyl, (CH2)0-4-aryl, (CH2)0-4-cycloalkyl, C1-4 alkyl-OR4, C1-4 alkyl-SR4, OR4; R4 = H, C1-6 alkyl, (CH2)0-4-aryl; R5 = H, C1-6 alkyl, aryl; R6, R7 = independently H, C1-6 alkyl, C1-6-OR4, (CH2)0-4-aryl, (CH2)1-4-cycloalkyl, (CH2) 1-4-heteroaryl, CH2Q, (CH2) 1-4-CO2R4, (CH2) 1-4CONR52, 5-[[5-(dimethylamino)-1-naphthylsulfonyl]amino]pentyl; NR6R7 = azetidino, pyrrolidino, piperidino, morpholino, 4-thiomorpholino, 4-R8-substituted piperazino; R8 = H, C1-6 alkyl, (CH2)1-4-aryl, CHPh2, (CH2)1-4-heteroaryl; Q = saturated, 5- or 6-membered heterocycle containing 1-2 N, O, or S atoms; n

0, 1] and II (R9 = CH2Ph, CH2CH2Ph), or pharmaceutically acceptable salts thereof, are presented as inhibitors various enzymes from the matrix metalloproteinase family, predominantly stromelysins. Thus, I and II are useful for the treatment of matrix metalloendoproteinase diseases such as osteoarthritis, rheumatoid arthritis, septic arthritis, osteopenias such as osteoporosis, tumor metastasis (invasion and growth), periodontitis, gingivitis, corneal ulceration, dermal ulceration, gastric ulceration, and other diseases related to connective tissue degradation Thus, reaction of L-phenylalanine Me ester isocyanate (preparation given) with 5-amino-1,3,4-thiadiazole-2-thiol in THF gave 58% Me ester III (R = OMe). Amidation of ester III (R = OMe) with MeNH2 gave amide III (R = NHMe). Ureas II (R = OMe, NHMe) and related compds. were tested for stromelysin inhibition, with III (R = OMe, NHMe) having Ki = 0.9 and 0.27 μ M, resp.

IT 198701-11-0P

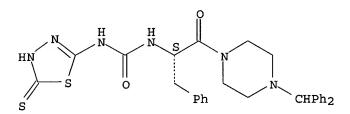
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of thiadiazolyl(thio)ureas useful as matrix metalloprotease inhibitors)

RN 198701-11-0 HCAPLUS

CN Piperazine, 1-[(2S)-2-[[[(4,5-dihydro-5-thioxo-1,3,4-thiadiazol-2-yl)amino]carbonyl]amino]-1-oxo-3-phenylpropyl]-4-(diphenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L12 ANSWER 24 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:702033 HCAPLUS

DOCUMENT NUMBER: 127:358878

TITLE: Preparation of diphenylpiperazine diastereomers

INVENTOR(S): Yanagi, Masayuki; Namiki, Takayuki; Yamada, Koji;

Nakamichi, Norihiro; Kimura, Makoto; Kawakatsu,

Yasuyuki; Takahashi, Motohiko

PATENT ASSIGNEE(S): Pola Chemical Industries, Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.

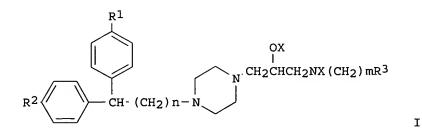
CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09278769	A2	19971028	JP 1996-115830	19960412
JP 3577161	B2	20041013		
PRIORITY APPLN. INFO.:			JP 1996-115830	19960412
OTHER SOURCE(S):	MARPAT	127:358878		
GI				



AB Diphenylpiperazine diastereomers I [X = CONHCHR4R5; R1, R2 = H, halo; R3,

R4 = (substituted) C6-12 aromatic hydrocarbon; R5 = C1-4 alkyl; m, n = 0-4], useful as standard substances to analyze optical purity of diphenylpiperazines, which are useful as pharmaceuticals for treatment of circulatory organs and central nervous systems, are prepared by reaction of diphenylpiperazines I (X = H; R1, R2, R3, m, n = same as above) with optically active R4CHR5NCO (R4, R5 = same as above). A MeCN solution of 200 mg S-(-)-I (X = H, R1, R2 = F, R3 = Ph, m = 0, n = 3) [S-(-)-II] wastreated with 400 mg R-(-)-1-(1-naphthyl)ethyl isocyanate (III) at 50° for 40 min to give 250 mg (R, R, R)-I [R1, R2, R3, m, n = same]as S-(-)-II, X = CONHCHR4R5, R4 = Me, R5 = 1-naphthyl]. Racemic II was added with III in THF-MeCN at 50° for 40 min and analyzed using HPLC to show two peaks of about equal area. 198418-21-2P 198418-23-4P

IT

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of diphenylpiperazine diastereomers by reaction of diphenylpiperazines with isocyanates)

RN 198418-21-2 HCAPLUS

Carbamic acid, [1-(1-naphthalenyl)ethyl]-, 1-[[4-[bis(4-CN fluorophenyl) methyl] -1-piperazinyl] methyl] -2-[[[[1-(1naphthalenyl)ethyl]amino]carbonyl]phenylamino]ethyl ester, [1S-[1R*(S*),2(S*)]]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN198418-23-4 HCAPLUS Carbamic acid, [1-(1-naphthalenyl)ethyl]-, 1-[[4-[bis(4-CN fluorophenyl) methyl] -1-piperazinyl] methyl] -2-[[[[1-(1naphthalenyl)ethyl]amino]carbonyl]phenylamino]ethyl ester,

[1R-[1R*(R*),2(R*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L12 ANSWER 25 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:702032 HCAPLUS

DOCUMENT NUMBER: 127:358877

TITLE: Preparation of diphenylpiperazine diastereomers

INVENTOR(S): Yanagi, Masayuki; Namiki, Takayuki; Yamada, Koji;

Nakamichi, Norihiro; Kimura, Makoto; Kawakatsu,

Tsuneyuki; Takahashi, Motohiko

PATENT ASSIGNEE(S): Pola Chemical Industries, Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 20 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09278768	A2	19971028	JP 1996-115810	19960412
JP 3577160	B2	20041013		
PRIORITY APPLN. INFO.:			JP 1996-115810	19960412
OTHER SOURCE(S):	MARPAT	127:358877		
GI				

Diphenylpiperazine diastereomers I [X = CONHCHR4R5; R1, R2 = H, halo; R3, R4 = (substituted) C6-12 aromatic hydrocarbon; R5 = C1-4 alkyl; m, n = 0-4], useful as standard substances to analyze optical purity of diphenylpiperazines, which are useful as pharmaceuticals for treatment of circulatory organs and central nervous systems, are prepared by reaction of diphenylpiperazines I (X = H; R1, R2, R3, m, n = same as above) with optically active R4CHR5NCO (R4, R5 = same as above). A MeCN solution of 240 mg S-(-)-I (X = H, R1, R2 = F, R3 = Ph, m = 0, n = 3) [S-(-)-II] was treated with 210 mg R-(-)-1-(1-naphthyl)ethyl isocyanate (III) under ice cooling for 40 min and at room temperature for 19 h to give 250 mg (R, R)-I

R2, R3, m, n = same as S-(-)-II, X = CONHCHMeR5, R5 = 1-naphthyl].
Racemic II was added with III in THF at 5° for 48 h and analyzed using HPLC to show two peaks of about equal area.

IT 198332-07-9P 198332-08-0P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of diphenylpiperazine diastereomers by reaction of diphenylpiperazines with isocyanates)

RN 198332-07-9 HCAPLUS

CN Urea, N-[3-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]-2-hydroxypropyl]N'-[1-(1-naphthalenyl)ethyl]-N-phenyl-, [R-(R*,R*)]- (9CI) (CA INDEX
NAME)

Absolute stereochemistry.

RN 198332-08-0 HCAPLUS

CN Urea, N-[3-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]-2-hydroxypropyl]N'-[1-(1-naphthalenyl)ethyl]-N-phenyl-, [S-(R*,S*)]- (9CI) (CA INDEX
NAME)

Absolute stereochemistry.

L12 ANSWER 26 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:589063 HCAPLUS

DOCUMENT NUMBER: 127:234183

TITLE: Ureidophenols as ACAT inhibitors and antioxidants

INVENTOR(S): Suzuki, Toshikazu; Ohmizu, Hiroshi; Hashimura,

Yoshimasa; Kubota, Hitoshi; Tanaka, Keiko

PATENT ASSIGNEE(S): Tanabe Seiyaku Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 84 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	ENT 1	NO.			KINI)	DATE		AF	PLICAT	I NOIT	NO.		D	ATE	
						-								-		
EP	79024	10			A1		1997	0820	EF	1997-	-1023	15		1	9970	213
	R:	AT,	BE,	CH,	DE,	DK	, ES,	FI,	FR, G	B, GR,	IE,	IT,	LI,	LU,	MC,	NL,
		PT,	SE													
CA	21973	364			AA		1997	0816	CA	1997-	-2197	364		1	9970	212
JP	10195	5037			A2		1998	0728	JF	1997-	-2858:	2		1.	9970	213
US	58497	732			Α		1998	1215	บร	1997-	-8006	80		1	9970	214
CN	11658	315			Α		1997	1126	CI/	1997-	-1019	73		1	9970	217
PRIORITY	APPI	LN.	INFO.	. :					JF	1996-	-2808	3		A 1	9960	215
									JF	1996-	-3000	32	7	A 1	9961	112

OTHER SOURCE(S): MARPAT 127:234183

GI

AB Ureidophenols I [R = H, alkyl, alkyloxy; R1 = alkyl; R2 = alkyl, alkoxy;
R3 = H, alkyl, acyl; W = O, S or NR6; NR4R5 = (un)substituted NH2, N
heterocycle; R6 = H, alkyl, aryl, OH, alkoxy] were prepared I possess both
an ACAT inhibitory activity and an antioxidative activity (no data).
Thus, 4,2-MeO(Me3C)C6H3OH was treated with 4-MeOC6H4NH2 to give the
azobenzene II [R7 = N:NC6H4OMe-4], which was O-protected, reduced to the
amine, treated with PhNCO, and O-deprotected to give the ureidophenol II
[R7 = NHCONHPh].

IT 195312-37-9P 195312-64-2P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of ureidophenols as ACAT inhibitors and antioxidants)

RN 195312-37-9 HCAPLUS

CN Urea, N-[3-(1,1-dimethylethyl)-2-hydroxy-5-methoxyphenyl]-N'-[3-[4-(diphenylmethyl)-1-piperazinyl]propyl]- (9CI) (CA INDEX NAME)

RN 195312-64-2 HCAPLUS

CN Urea, N-[3-(1,1-dimethylethyl)-2-hydroxy-5-methoxyphenyl]-N'-[2-[4-(diphenylmethyl)-1-piperazinyl]ethyl]-, dihydrochloride (9CI) (CA INDEX NAME)

●2 HCl

L12 ANSWER 27 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:587687 HCAPLUS

DOCUMENT NUMBER:

127:293639

TITLE:

Preparation of anticholecystokinin compounds derived

from serine

INVENTOR (S): Ogawa, Masashi; Morita, Tadashi; Matsuda, Satoshi;

Iibuchi, Norihiro; Suzuki, Hideaki; Kidokoro, Shinpei

PATENT ASSIGNEE(S): Tobishi Pharmaceutical Co., Japan SOURCE:

Jpn. Kokai Tokkyo Koho, 18 pp.

CODEN: JKXXAF

Ι

DOCUMENT TYPE: Patent Japanese LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE -----JP 09227523 A2 19970902 JP 1996-61621 19960226 PRIORITY APPLN. INFO.: JP 1996-61621 19960226

OTHER SOURCE(S): MARPAT 127:293639

GI

AB Title compds. I [R = (substituted) Ph, naphthyl, thiazolopyrimidinyl, pyrazolopyrimidinyl, (benzene-condensed) O-, N-, and/or S-containing 5- or 6-membered heterocyclyl; n = 0, 1] or their salts are useful for prevention and treatment of pancreatitis, pancreatic cancer, duodenal ulcer, gastric ulcer, etc. (R)-4-diphenylmethyl-1-[3-(3-ethoxycarbonyl-2pyridyl)thio-2-tert-butoxycarbonylaminolpropionylpiperazine (preparation given) was treated with HCl in CH2Cl2 at room temperature for 20 min and treated with o-tolyl isocyanate at room temperature for 3 h to give 72% ureide, which was hydrolyzed with LiOH in THF-H2O-MeOH at room temperature for 2 h to give 93% (R)-I (R = C6H4Me-2, n = 1). (R)-I (R = 2-amino-4-chlorophenyl, n = 0) invitro inhibited cholecystokinin-induced contraction of guinea pig ileum with IC50 of 3.0 + 10-7M.

TТ 196932-67-9P 196932-68-0P 196933-03-6P 196933-06-9P 196933-08-1P 196933-24-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of serine derivs. as anticholecystokinin compds.)

RN196932-67-9 HCAPLUS

3-Pyridinecarboxylic acid, 2-[[3-[4-(diphenylmethyl)-1-piperazinyl]-2-CN [[[(2-methylphenyl)amino]carbonyl]amino]-3-oxopropyl]thio]-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 196932-68-0 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-[[3-[4-(diphenylmethyl)-1-piperazinyl]-2-[[[(3-methoxyphenyl)amino]carbonyl]amino]-3-oxopropyl]thio]-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 196933-03-6 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-[[2-[[[(3,4-dichlorophenyl)amino]carbonyl]amino]-3-[4-(diphenylmethyl)-1-piperazinyl]-3-oxopropyl]thio]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

RN 196933-06-9 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-[[3-[4-(diphenylmethyl)-1-piperazinyl]-2-[[[(3-methylphenyl)amino]carbonyl]amino]-3-oxopropyl]thio]- (9CI) (CA INDEX NAME)

RN 196933-08-1 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-[[2-[[[(3-chlorophenyl)amino]carbonyl]amino]-3-[4-(diphenylmethyl)-1-piperazinyl]-3-oxopropyl]thio]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

RN 196933-24-1 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-[[2-[[[(2,6-dichloro-4-pyridinyl)amino]carbonyl]amino]-3-[4-(diphenylmethyl)-1-piperazinyl]-3-oxopropyl]thio]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Absolute stereochemistry.

RN 196933-60-5 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-[[2-[[[(3,4-dichlorophenyl)amino]carbonyl]amino]-3-[4-(diphenylmethyl)-1-piperazinyl]-3-oxopropyl]thio]-, ethyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 196933-64-9 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-[[3-[4-(diphenylmethyl)-1-piperazinyl]-2-[[[(3-methylphenyl)amino]carbonyl]amino]-3-oxopropyl]thio]-, ethyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 196933-65-0 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-[[2-[[[(3-chlorophenyl)amino]carbonyl]amino]-3-[4-(diphenylmethyl)-1-piperazinyl]-3-oxopropyl]thio]-, ethyl ester, (R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 196933-81-0 HCAPLUS

CN 3-Pyridinecarboxylic acid, 2-[[2-[[[(2,6-dichloro-4-pyridinyl)amino]carbonyl]amino]-3-[4-(diphenylmethyl)-1-piperazinyl]-3-oxopropyl]thio]-, ethyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L12 ANSWER 28 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1996:132309 HCAPLUS

DOCUMENT NUMBER: 124:289330

TITLE: Synthesis and pharmacology of combined histamine

H1-H2-receptor antagonists containing diphenhydramine

and cyproheptadine derivatives

AUTHOR(S): Wolf, Cornelia; Shunack, Walter

CORPORATE SOURCE: Institut fur Pharmazie, Freie Universitat Berlin,

Berlin, D-14195, Germany

SOURCE: Archiv der Pharmazie (Weinheim, Germany) (1996),

329(2), 87-94

CODEN: ARPMAS; ISSN: 0365-6233

PUBLISHER: VCH
DOCUMENT TYPE: Journal
LANGUAGE: English

- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- AB The classical histamine H1-receptor antagonists diphenydramine and cyproheptadien and their derivs. were connected with a 2-quanidinothiazoel containing structure derived from the H2-receptor antagonist tiotidine in order to obtain combined H1-/H2-receptor antagonists. The two moieties were not directly linked together, but were separated by a polymethylene spacer and a polar group (nitroethenediamine or urea). Thus 12 compds. were obtained that proved in vitro to possess high H1- and H2-receptor antagonist activity at the isolated guinea-pig ileum (H1) and the isolated guinea-pig right atrium (H2), resp. The incorporation of the diphenhydramine as well as the cyproheptadine component provides high affinity to H1-receptors. The tricyclic cyproheptadine and its 10,11-dihydro derivative (e.g., I), however, cause a decrease of H2-receptor antagonist potency compared to the diphenhydramines (e.g., II and III; X=H,Cl,F,Me). Using nitroethenediamine as the polar group is apparently more favorable to H1- and H2-receptor affinity as the urea function. All compds. elicit a dual mode of competitive and noncompetitive antagonism. Among the novel compds. the nitroethenediamines with 4-fluoro- or 4-methyl-substituted diphenhydramine as H1-receptor antagonist moiety (II; X=F,Me) display the most potent H1- and H2-receptor antagonist effects. The presented concept is a very promising way to combine H1- and H2-receptor antagonist properties in one mol.
- IT 175692-43-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and histamine H1- and H2-receptor antagonism of nitroethenediamines and ureas containing diphenhydramine and cyproheptadine derivs.)

- RN 175692-43-0 HCAPLUS
- CN Urea, N-[2-[[[2-[(aminoiminomethyl)amino]-4-thiazolyl]methyl]thio]ethyl]N'-[7-[4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-piperidinyl]heptyl](9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

L12 ANSWER 29 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:997894 HCAPLUS

DOCUMENT NUMBER: 124:175843

TITLE: Preparation of piperidine-derivative blood platelet

aggregation inhibitors and serotonin antagonists

INVENTOR(S): Makino, Shingo; Arisaka, Harumi; Yamamoto, Hiroshi;

Shoji, Masataka; Yoshimoto, Ryota

PATENT ASSIGNEE(S): Ajinomoto co., Inc., Japan

SOURCE: Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	TENT NO.	KIND	DATE	APPLICATION NO.	
EP	682015	A 1	19951115	EP 1995-302647	
	682015				
				GB, GR, IE, IT, LI,	
CA	2147429	AA	19951021	CA 1995-2147429 CN 1995-104192	19950420
CN	1112560	A	19951129	CN 1995-104192	19950420
CN	1056143	В	20000906		
JP	08003135	A2	19960109	JP 1995-94676	19950420
JP	2962186	B2	19991012		
JP	2001002571	A2	20010109	JP 2000-175490 EP 2001-103999	19950420
					19950420
	1103544				
				GB, GR, IT, LI, LU,	
AT	204566	E	20010915	AT 1995-302647 ES 1995-302647 PT 1995-302647	19950420
ES	2161828	Т3	20011216	ES 1995-302647	19950420
PT	682015	T	20020130	PT 1995-302647	19950420
US	5932593	Α	19990803	US 1997-917180	19970825
JP	11246526 3215676	A2	19990914	JP 1998-372550	19981228
JP	3215676	B2	20011009		
US	2002019533	A1	20020214	US 1999-245846	19990208
US	2002147195	A1	20021010	US 2002-101980 US 2003-658322	20020321
US	2004063701	A1	20040401	US 2003-658322	20030910
PRIORIT	Y APPLN. INFO.:			JP 1994-81499	
				EP 1995-302647	A3 19950420
				JP 1995-94676	A3 19950420
				JP 1998-372550	A3 19950420
				US 1995-425645	B1 19950420
				US 1997-917180	A1 19970825
				US 1999-245846	B3 19990208
				US 2002-101980	B1 20020321

OTHER SOURCE(S):

MARPAT 124:175843

GI

$$\begin{array}{c|c} & \text{OHCN} & \text{CONH} (\text{CH}_2)_2 \\ & & \text{N} \\ & & \text{N} \\ & & \text{Z}^1 \\ & & & \text{II} \end{array}$$

AB The title compds. [I; A1 = (un) substituted pyridyl, piperidyl, piperidino, morpholinyl, morpholino, thiomorpholinyl, thiomorpholino, piperazinyl, (un) substituted alkyl or cycloalkyl, etc.; X1 = H, halogen atom; Y1 = CONH, NHCO, CONHCH2, O(CH2)n, CO2; n = 0-4; Z1 = CH=CH, SCH2, S, CH2CH2], useful as blood platelet aggregation inhibitors which specifically inhibit the serotonin 2 receptor, are prepared Thus, piperidine derivative II was prepared which demonstrated a pKi of 8.4.

ACCESSION NUMBER: 1994:270115 HCAPLUS

DOCUMENT NUMBER: 120:270115

TITLE: Ethylamine derivatives and antihypertensives

containing the same

INVENTOR(S): Shoji, Masataka; Toyota, Kozo; Eguchi, Chikahiko;

Yoshimoto, Ryota; Koyama, Yosikatsu; Domoto, Hideki;

Kamimura, Akira

PATENT ASSIGNEE(S): Ajinomoto Co., Inc., Japan

SOURCE: U.S., 34 pp. Cont.-in-part of U.S. Ser. No. 201,911,

abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5231105	A	19930727	US 1989-354880	19890522
US 5250681	A	19931005	US 1991-655775	19910215
US 5393890	A	19950228	US 1994-269628	19940701
US 38257	E	20030923	US 1999-248236	19990210
PRIORITY APPLN. INFO.:			JP 1987-138405 A	19870602
			US 1988-201911 B	2 19880602
			JP 1988-293408 A	19881118
			JP 1988-303461 A	19881130
			JP 1989-64059 A	19890316
			US 1989-354880 A	2 19890522
			US 1989-443438 B	2 19891130
			US 1991-655775 A	1 19910215
			US 1993-72458 B	1 19930607
			US 1994-269628 A	5 19940701

OTHER SOURCE(S): MARPAT 120:270115

GI

QXCH₂CH₂N
$$A-B$$
 I

MeO $C_{12}H_{25}$ OMe

MeO $C_{12}H_{25}$ OMe

AB The title compds., such as cyclic ethylamine derivs. I (AB = substituted phenylcarbonyl; Q = aryl; X = alkyl) and their uses as antihypertensives are claimed. For example, α -(3,4-dimethoxyphenyl)- α -[3-[4-(4-methoxybenzoyl)piperidin-1-yl]propyl]tridecanenitrile (II) is claimed.

IT 130374-95-7P 153510-20-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)

IT 173722-38-8P 173722-43-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of piperidine-derivative blood platelet aggregation inhibitors

and

serotonin antagonists)

RN 173722-38-8 HCAPLUS

CN Cyclohexanecarboxamide, N-[2-[4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-piperidinyl]ethyl]-1-[[(dimethylamino)carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 173722-43-5 HCAPLUS

CN Butanamide, N-[2-[4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-piperidinyl]ethyl]-4-[[(dimethylamino)carbonyl]amino]- (9CI) (CA INDEX NAME)

L12 ANSWER 30 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

(preparation of, as antihypertensive)

RN 130374-95-7 HCAPLUS

CN Urea, N-[2-[4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-piperidinyl]ethyl]-N'-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

HC1

RN 153510-20-4 HCAPLUS

CN Urea, N-[2-[4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-piperidinyl]ethyl]N'-phenyl- (9CI) (CA INDEX NAME)

L12 ANSWER 31 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1990:611850 HCAPLUS

DOCUMENT NUMBER: 113:211850

TITLE: Preparation of 4-(dibenzocycloheptenylidene)piperidine

s and analogs as antihypertensives

INVENTOR(S): Syoji, Masataka; Domoto, Hideki; Toyota, Kozo;

Yoshimoto, Ryota; Eguchi, Chikahiko; Kamimura, Akira

PATENT ASSIGNEE(S): Ajinomoto Co., Inc., Japan

SOURCE: Eur. Pat. Appl., 35 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 371805	A2	19900606	EP 1989-312488	19891130
EP 371805	A3	19910731		
EP 371805	B1	19960626		
R: CH, DE, FR,	GB, IT	, LI		
CA 2004211	AA	19900531	CA 1989-2004211	19891129
JP 03047168	A2	19910228	JP 1989-311718	19891130
PRIORITY APPLN. INFO.:			JP 1988-303461 A	19881130
			JP 1989-64059 A	19890316

OTHER SOURCE(S): MARPAT 113:211850

GI For diagram(s), see printed CA Issue.

The title compds. [I; A = an (un) substituted aromatic or heterocyclic ring; R1R2 = atoms to complete an (un) substituted benzene ring; X = alkyl, aralkyl-, aryl-, cycloalkyl-, heterocyclyl-containing group, etc.; Y = heteroatom, (hetero) alkylene, alkenylene] were prepared Thus, title compound II (X = H) was refluxed overnight with Me(CH2)5Br in MeCOCH2CHMe2 containing NaI and K2CO3 to give, after acidification II.HCl (X = hexyl). II.HCl [X = Ph(CH2)4] lowered blood pressure 136 mm Hg in rats 4 h after receiving 10 mg/kg i.v.

IT 130374-95-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of, as antihypertensive)

RN 130374-95-7 HCAPLUS

CN Urea, N-[2-[4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-piperidinyl]ethyl]-N'-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

L12 ANSWER 32 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1990:611849 HCAPLUS

DOCUMENT NUMBER: 113:211849

TITLE: Arylalkylpiperidines and -piperazines as

antihypertensives

INVENTOR(S):
Syoji, Masataka; Toyota, Kozo; Eguchi, Chikahiko;

Domoto, Hideki; Yoshimoto, Ryota; Kamimura, Akira

PATENT ASSIGNEE(S): Ajinomoto Co., Inc., Japan SOURCE: Eur. Pat. Appl., 59 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT 'NO.	KIND	DATE	APPLICATION NO.		DATE
				-	
EP 370712	A2	19900530	EP 1989-311961		19891117
EP 370712	A3	19911002			
R: CH, DE, FR,	GB, IT	, LI			
JP 02262541	A2	19901025	JP 1989-26232		19890203
PRIORITY APPLN. INFO.:			JP 1988-293408	Α	19881118
			JP 1988-303461	Α	19881130
			JP 1989-26232	Α	19890203
			JP 1989-64059	Α	19890316

OTHER SOURCE(S):

MARPAT 113:211849

GΙ

in

OMe
$$(CH_2)$$
 9Me CN (CH_2) 3N CO F

QXCH2CH2N(Z)CH2CH2YW[I; Q = PhO, 4-F3CC6H4, 2-O2NC6H4, 2-H2NC6H4,ΔR 2-EtO2CNHC6H4, naphthyl, etc.; X = (substituted) (heteroatom-interrupted) alkylene, alkenylene; Z = Me; W = H; ZW = CH2CH2; Y = PhCOCH, 4-FC6H4COCH, 4-FC6H4CON, PhN, 4-FC6H4 CH:C Ph2CHN, 4-FC6H4 SO2N, etc.], were prepared Thus, 3,4-(MeO)2C6H3CH2CN in dimethoxyethane (DME) was added dropwise to NaNH2 in DME at room temp; the mixture was then stirred at 50° for 1 h and Br(CH2)9Me in DME was added at room temperature The mixture was stirred

1 h at room temperature and 2 h at 50°, cooled, treated with NaNH2, stirred 2 h at 50°, cooled, treated with Br(CH2)3Cl in DME, stirred 1 h at room temperature and 2 h at 50° to give 3,4-(MeO)2C6H3C[(CH2)9Me][(CH2)3Cl]CN. The latter was refluxed with 4-(4-fluorobenzoyl)piperidine.HCl, K2CO3, and NaI in MeCOCH2CHMe2 overnight to give II. I at 10 mg/kg i.v. in rats reduced blood pressure by up to 135 mm Hg 30 min after administration.

IT 130374-95-7P

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of, as antihypertensive)

130374-95-7 HCAPLUS RN

Urea, N-[2-[4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-piperidinyl]ethyl]-CN N'-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

L12 ANSWER 33 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1989:574121 HCAPLUS

DOCUMENT NUMBER: 111:174121

TITLE: Preparation of 3-(piperidinoalkyl)thieno- and

furopyrimidine-2,4-diones as serotonin antagonists and

alpha adrenergic blocking agents

INVENTOR(S): Press, Jeffery B.; Russell, Ronald K.

PATENT ASSIGNEE(S): Ortho Pharmaceutical Corp., USA

SOURCE: U.S., 13 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4835157	Α	19890530	US 1988-168199	19880315
PRIORITY APPLN. INFO.:			US 1988-168199	19880315
OTHER SOURCE(S):	CASRE	ACT 111:1741	21: MARPAT 111:174121	

GI

The title compds. [I; ring X = Q - Q2; X1 = S; O, R = H, C1-3 alkyl, C1, AB Br, NO2; R1 = H, C1-6 alkyl, branched-chain C3-6 alkyl, C3-6 alkenyl, C3-6 alkynyl, COR3; R2 = Q3; R3 = C1-6 alkyl, (un)substituted Ph; R4 = H; or R4R5, R5R6 = double bond; R6R5 = double bond or R6R7 = 0; R7 = (un) substituted Ph or R7R6 = O; R8 = H, C1, Br, F, CF3, C1-6 alkyl, C1-3 alkoxy; m = 0, 1; n = 2-6; with provisos that when ring X = Q2, $R \neq$ C1-3 alkyl; when R4 = R5 = H, R6R7 = O and m = 1, when R4 = H, R5R6 = C1-3double bond, R7 = (un)substituted, and m = 1], useful as cardiovascular agents and antihypertensives, were prepared A mixture of N-(3carboethoxythien-2-yl)-N-(2-chloroethyle)urea, 4-(4fluorbenzoyl)piperidine hydrochloride, NaHCO3, and NaI in THF was refluxed 4 days to give 70% N-(3-carboethoxythien-2-yl)-N-[2-[4-(4fluorobenzoyl)piperidin-1-yl]ethyl]urea which was stirred at room temperature with 50% NaOH in MeOH to give 78% 3-[2-[4-(4-fluorobenzoyl)piperidin-1yl]ethyl]thieno[2,3-d]pyrimidine-2,4-dione (II). II antagonized serotonin-induced pressor response in spontaneously hypertensive rats with an ED50 value of 0.016 mg/kg vs. 0.013 and 0.008 mg/kg for ketanserin and ritanserin.

IT 123195-47-1P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, as intermediate for cardiovascular agents and
 antihypertensives)

RN 123195-47-1 HCAPLUS

CN 3-Furancarboxylic acid, 4-[[[[2-[4-[bis(4-fluorophenyl)methylene]-1-piperidinyl]ethyl]amino]carbonyl]amino]- (9CI) (CA INDEX NAME)

L12 ANSWER 34 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1987:138471 HCAPLUS

DOCUMENT NUMBER: 106:138471

TITLE: Anti-anaphylactic and antibronchospastic

N-benzhydryldiazacycloalkylalkananilides

INVENTOR(S):
Nardi, Dante; Leonardi, Amedeo; Motta, Gianni;

Cazzulani, Pietro

PATENT ASSIGNEE(S): Recordati S. A. Chemical and Pharmaceutical Co.,

Switz.

SOURCE: Eur. Pat. Appl., 11 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

EP	2079	01			A1	19870	107	EP	1986-830172		19860619
EP	2079	01			B1	19901	128				
	R:	AT,	BE,	CH,	DE,	FR, GB,	LI,	LU, NI	S, SE		
$_{ m IL}$	7880	4			A1	19911	215	$_{ m IL}$	1986-78804		19860516
ZA	8603	754			Α	19870	128	ZA	1986-3754		19860520
FI	8602	204			Α	19861	.221	FI	1986-2204		19860526
CA	1269	980			A1	19900	605	CA	1986-510539		19860602
US	4675	319			Α	19870	623	US	1986-871858		19860609
JP	6129	3977			A2	19861	.224	JP	1986-137260		19860612
ES	5561	45			A1	19871	001	ES	1986-556145		19860617
ИО	8602	427			Α	19861	.222	NO	1986-2427		19860618
NO	1638	16			В	19900	417				
NO	1638	16			С	19900	725				
AU	8658	828			A1	19861	224	AU	1986-58828		19860619
AU	5923	48			B2	19900	111				
CN	8610	5641			Α	19870	401	CN	1986-105641		19860619
CN	1011	784			В	19910	227				
HU	4383	7			A2	19871	.228	HU	1986-2581		19860619
HU	1980	33			В	19890	728				
AT	5872	9			E	19901	215	AT	1986-830172		19860619
DK	8602	911			Α	19861	.221	DK	1986-2911		19860620
PRIORITY	APP	LN.	INFO	.:				IT	1985-21225	Α	19850620
								EP	1986-830172	Α	19860619

OTHER SOURCE(S): MARPAT 106:138471

Title compds. I [R = H, alkyl; R1, R2 = H, (di)(alkyl)- or (bis)(hydroxyalkyl)amino, morpholino, piperidino, N-alkylpiperazino, 1,3-dithiolan-2-ylideneamino, N-alkylureido; A = alkylene] are prepared as antianaphylactic and antibronchospastic agents. A mixture of 19 g CH2:CHCONMeC6H4NO2-3 and 23 g N-benzhydrylpiperazine in PhMe was refluxed for 3 h to give, after workup and acidification, 17.2 g I.HCl (R = Me, R1 = NO2, R2 = H, A = CH2CH2) (II). Redn.of 15.6 g II with SnCl2 in EtOH at 70° gave 10.2 g I (R = Me, R1 = NH2, R2 = H, A = CH2CH2), which had an ED50 of 0.010 mmol/kg in the homologous antibody-induced passive cutaneous anaphylaxis test in rats.

IT 107314-45-4P 107314-66-9P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as antianaphylactic and antibronchospastic)

RN 107314-45-4 HCAPLUS

CN 1-Piperazinepropanamide, 4-(diphenylmethyl)-N-[4-[[(methylamino)carbonyl]amino]phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \overset{\text{O}}{\parallel} \\ \text{MeNH-C-NH} \\ & \overset{\text{O}}{\parallel} \\ \text{NH-C-CH}_2\text{-CH}_2 \\ \end{array}$$

The thioxanthenylidenepiperidines I (R = H, alkyl, alkenyl, alkynyl, CN, etc.; R1,R2 = H, halo, alkyl, etc.) are prepared as acaricides, insecticides, and fungicides. Thus, 4-(2-chlorothioxanthen-9-ylidene)piperidine was refluxed with NaH in THF for 22 h, followed by the addition of EtI and refluxing for 24 h to give I (R = Et, R1 = 2-Cl, R2 = H) (II). Lucilia sericata Reared on a medium containing 0.1% II showed 80-100% mortality.

IT 102905-87-3P 102905-96-4P

Ι

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as pesticides)

RN 102905-87-3 HCAPLUS

CN 1-Piperidinecarboxamide, 4-(2-chloro-9H-thioxanthen-9-ylidene)-N-methoxy-N-methyl- (9CI) (CA INDEX NAME)

RN 102905-96-4 HCAPLUS

CN 1-Piperidinecarboxamide, N-methoxy-N-methyl-4-(9H-thioxanthen-9-ylidene)-(9CI) (CA INDEX NAME)

RN 107314-66-9 HCAPLUS

CN

1-Piperazinepropanamide, 4-(diphenylmethyl)-N-[4-

[[(methylamino)carbonyl]amino]phenyl]-, hydrochloride (9CI) (CA INDEX NAME)

●x HCl

L12 ANSWER 35 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1986:420530 HCAPLUS

DOCUMENT NUMBER: 105:20530

TITLE: Thioxanthenes used as pesticides INVENTOR(S): Traber, Walter; Fischer, Hanspeter

PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz. SOURCE: Eur. Pat. Appl., 33 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	D	DATE
				-	
EP 179020	A2	19860423	EP 1985-810466	1	L9851014
EP 179020	A3	19870325			
R: BE, CH, DE,	FR, GB	, IT, LI, NL			
US 4777177	Α	19881011	US 1985-786380	1	L9851010
BR 8505222	Α	19860729	BR 1985-5222	1	L9851018
JP 61106573	A2	19860524	JP 1985-234387	1	L9851019
PRIORITY APPLN. INFO.:			CH 1984-5010	A 1	L9841019
			CH 1984-5011	A 1	L9841019
			CH 1985-3830	A 1	L9850905

OTHER SOURCE(S): MARPAT 105:20530

GΙ

L12 ANSWER 36 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1979:186989 HCAPLUS

DOCUMENT NUMBER:

90:186989

TITLE:

Hexahydropyrimidines

INVENTOR(S):

Weber, Rolf Ortwin; Anagnostopulos, Hiristo; Gebert,

Ulrich

PATENT ASSIGNEE(S):

Hoechst A.-G., Fed. Rep. Ger.

SOURCE:

Ger. Offen., 28 pp. CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATE	ENT NO.		KIND	DATE	A	PLICATION NO.		DATE
	- -							
DE 2	2727469		A1	19781221	DE	1977-2727469		19770618
CA 1	L085396		A1	19800909	CF	1978-304474		19780531
AU 7	7836788		A1	19791206	Αt	1978-36788		19780601
ES 4	170727		A1	19790116	ES	1978-470727		19780613
EP 2	220		A1	19790110	E	1978-200041		19780614
EP 2	220		В1	19810429				
	R: BE,	CH, DE	, FR,	GB, LU, NL,	SE			
US 4	1216216	•	A	19800805	US	1978-915899		19780615
DK 7	7802727		Α	19781219	DF	1978-2727		19780616
NO 7	7802108		Α	19781219	NC	1978-2108		19780616
ZA 7	7803465		Α	19790725	z_{I}	1978-3465		19780616
AT 7	7804412		A	19800215	ΑT	1978-4412		19780616
	358597		В	19800925	-			
	4009287		A2	19790124	JF	1978-72743		19780617
	6006420		B4	19810210	~-	2270 72720		15.0001.
PRIORITY		INFO .	21		DE	1977-2727469	Α	19770618
GI	WILDIN.					. 1711 2121407	7	10,,0010
GI								

$$Q-Z \longrightarrow N-Y-N \longrightarrow R^5$$

$$R^1$$

$$R^2$$

$$Q \longrightarrow R^3$$

$$R^4$$

The hexahydropyrimidines I (R1 = H, C1-2 alkyl, Ph, MeC6H4; R2 - R5 = H, C1-2 alkyl, R6 = H, benzo, C1-2 alkoxy, halo, haloalkyl, NO2, OH; Q = PhCH, bond; X = 0, S; Y = alkylene, hydroxyalkylene; Z = N, methine group) were prepared Thus, 1-phenyl-4-(3-aminopropyl)piperazine was treated with OCNCMe2CH2CO2Me to give the urea derivative II which was cyclized to give the pyrimidine III. The serotonin antagonist ED50 of III (i.v. rat) was 3 - 10 μ g/kg. At 1 + 10-5 g/mL III was a thrombocyte aggregation inhibitor.

IT 69950-10-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and cyclization of, uracil derivative from)

III

RN 69950-10-3 HCAPLUS

CN Butanoic acid, 3-[[[[3-[4-(diphenylmethyl)-1-piperazinyl]propyl]amino]carb onyl]amino]-3-methyl-, methyl ester (9CI) (CA INDEX NAME)

L12 ANSWER 37 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1978:22917 HCAPLUS

DOCUMENT NUMBER: 88:22917

TITLE: Acetohydroxamic acids

INVENTOR(S): Lafon, Louis

PATENT ASSIGNEE(S): Laboratoire L. Lafon S. A., Fr.

SOURCE: Ger. Offen., 105 pp.

CODEN: GWXXBX

DOCUMENT TYPE: LANGUAGE: Patent German

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

DE 2711451 C2 19900510 GB 1574822 A 19800910 GB 1976-11710 19760323 FR 2345430 B1 19820723 FR 1977-6997 19770309 FR 2345430 B1 19820723 ZA 7701564 A 19780726 ZA 1977-1584 19770316 AU 7723344 A1 19780921 AU 1977-23344 19770317 AU 516473 B2 19810604 US 4122186 A 19781024 US 1977-778543 19770317 FI 7700859 A 19770924 FI 1977-859 19770318 FI 62821 B 19821130 FF 62821 B 19821130 FF 62821 B 19801100 AT 7701930 A 19780915 AT 1977-1930 19770318 FI 62821 B 19800410 CH 620894 A 19800120 IL 1977-51705 19770321 AT 356078 B 19800410 CK 7701266 A 19770924 DK 1977-1266 19770322 DK 7701266 A 19770924 DK 1977-1266 19770322 DK 7701006 A 19770924 DK 1977-1266 19770322 SE 432420 B 19840402 SE 432420 B 19840402 SE 432420 C 198408712 NO 7701006 A 19770926 NO 1977-1006 19770322 SE 432420 C 198408712 NO 74014420 B 19810518 NO 144420 B 19810518 NO 144420 B 19810518 NO 144420 C 19810826 HU 172677 B 19771128 HU 1977-14912 19770322 SE 437105 A1 19781016 ES 1977-1941 19770322 NL 7703168 A 19770927 NL 1977-1961 19770322 DK 171197 B1 1990915 CS 1977-1904 19770322 NL 1703168 A 19770927 NL 1977-1904 19770322 DK 171197 B1 1990915 CS 1977-1904 19770323 DK 188801 B 19920506 DK 188801 C 19921001 DF 52144601 A2 19771202 JP 1977-32011 19770323 DK 188801 B 19900506 US 1978-930924 19780804 US 4153458 A 19790501 US 1978-930924 19780804 US 4153458 A 19790501 US 1978-930924 19780804 US 41209524 A 19800624 US 1978-930924 19780804 US 41209524 A 19800624 US 1978-930924 19780804 US 4209524 A 19800615 AT 1978-8400 19781124 AT 360939 A 19800101 FR 1980-9564 19780804 US 4225617 A 19	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2711451	DE 2711451	7.1	10771006	DE 1077-2711451	19770316
GB 1574822 A 19800910 GB 1976-11710 19760323 FR 2345430 B1 19770733 FR 1977-6997 1970309 FR 2345430 B1 19820723 ZA 1977-1584 1970316 AU 7723344 A1 19780921 AU 1977-23344 19770317 AU 516473 B2 19810604 US 1977-778543 19770317 RJ 516473 B2 19810604 US 1977-778543 19770317 FI 62821 B 19821130 FI 1977-859 19770318 FI 62821 B 19821130 FI 1977-930 19770321 AT 7701930 A 19790915 AT 1977-1930 19770321 AT 156078 B 198001231 CH 1977-3479 19770321 LT 15705 A1 19820930 LL 1977-15599 19770322 DK				DE 19//-2/11431	19//0310
FR 2345430 B1 19820723 ZA 7701584 A 19780726 ZA 1977-1584 19770316 AU 7723344 A1 19780726 ZA 1977-1584 19770317 AU 516473 B2 19810604 US 4122186 A 19780724 FI 1977-23344 19770317 FI 7700859 A 19770924 FI 1977-859 19770318 FI 62821 B 19821130 FI 62821 C 19830310 AT 7701930 A 19790915 AT 1977-1930 19770321 AT 7501930 A 19800410 CH 620894 A 19801231 CH 1977-3479 19770321 AT 356078 B 19800410 ES 852738 A1 19770922 BE 1977-175998 19770322 ES 852738 A1 19770922 BE 1977-175998 19770322 DK 7701266 A 1970924 DK 1977-1266 19770322 DK 7701266 A 19800400 SE 432420 B 1980400 SE 432420 B 1980400 SE 432420 C 19840712 NO 7701006 A 1970926 NO 1977-1006 19770322 NO 144420 B 19810518 NO 144420 C 19810826 NO 144420 B 19810518 NO 144420 C 19810826 NO 144420 B 19810518 NO 144420 B 19810518 NO 144420 C 19810826 NO 144420 B 1980101 CS 1977-1980 19770322 SE 457105 A1 19780106 SE 1977-1904 19770322 NL 7703168 A 19770927 NL 1977-3168 19770322 NL 7703168 A 19770927 NL 1977-32011 19770323 NL 78080424 B4 1987023 DD 129645 C 19780201 DD 1977-198023 19770323 NL 188801 C 19921001 JP 52144601 A2 19771202 JP 1977-32011 19770323 NL 780818 B 19920506 NL 188801 C 19921001 JP 52144601 A2 19771202 JP 1977-32011 19770323 NL 780818 A 19780201 DD 1977-198023 19770323 NL 188801 C 19921001 JP 52144601 A2 19771202 JP 1977-32011 19770323 NL 780818 B 19920506 NL 188801 C 19921001 JP 52144601 A2 19771202 JP 1977-32011 19770323 NL 780818 B 19920506 NL 188801 C 19921001 JP 52144601 A2 19771202 JP 1977-32011 19770323 NL 780818 B 19800420 US 1978-930926 19780804 US 4152458 A 19790501 US 1978-930926 19780804 US 420523 A 19800624 US 1978-930926 19780804 US 420523 A 19800624 US 1978-930926 19780804 US 420523 A 19800624 US 1978-930926 19780804 US 420524 A 19800925 AT 1978-8399 19780804 US 4205524 A 19800925 AT 1978-8399 19780804 US 4225617 A 19800930 US 1979-65254 19790804 US 4225617 A 19800930 US 1979-65254 19790824 US 4325964 A 1980093				GR 1976-11710	19760323
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     Psychotropic RCONHOH (R = e.g. CBu3, 5,5-diphenylhydantoinylmethyl,
AB
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AB Psychotropic RCONHOH (R = e.g. CBu3, 5,5-diphenylhydantolnylmethyl, CH2CONPh2, CH2NHCOCHPh2, CH2SOCH2C6H4Cl-4, phenothiazinylethyl, 1-phenyl-2-benzimidazolylmethyl, CH2NHC6H3Cl2-3,4, CH2NHCONHC6H4Cl-4) (38 compds.) were prepared Thus, Bu3CCO2H was chlorinated and treated with NH2OH.HCl to give 48% Bu3CCONHOH, which had tranquilizing activity in mice. Ph2NCOCH2CONHOH, at 100 mg/kg in 2 doses 2 h apart in rats, also lowered arterial blood pressure 10% and decreased heart frequency 8%.

IT 65083-33-2P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 65083-33-2 HCAPLUS

CN 1-Piperazineacetamide, 4-(diphenylmethyl)-N-hydroxy- (9CI) (CA INDEX NAME)

L12 ANSWER 38 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1968:506666 HCAPLUS

DOCUMENT NUMBER: 69:106666

Synthesis of 1,4-disubstituted piperazines. TITLE:

AUTHOR(S): Verderame, Matthew

CORPORATE SOURCE: Albany Coll. of Pharm., Union Univ., Albany, NY, USA SOURCE: Journal of Medicinal Chemistry (1968), 11(5), 1090-2

CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal English LANGUAGE:

OTHER SOURCE(S): CASREACT 69:106666 GΙ For diagram(s), see printed CA Issue.

AΒ Monosubstituted piperazines are treated with alkyl halides and acid halides to give I, where R is H or an alkyl or aralkyl group, and R1 is a carbamoyl, carbamoylmethyl, or aralkyl group. 1-Benzhydryl-4-(2,3dihydroxypropyl)piperazine protects mice against electroshock, and the following I (R and R1 given): Ph2CH CH2CBr:CH2; Ph2CH, CH2CONHCONHMe; Ph2CH, CHMeCONHCONHMe; are mild psychomotor stimulants in mice.

IT 18472-12-3P 18472-13-4P 18472-14-5P

18472-15-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and biol. activity of)

RN18472-12-3 HCAPLUS

CN 1-Piperazineacetamide, 4-(diphenylmethyl)-N-[(methylamino)carbonyl]- (9CI) (CA INDEX NAME)

RN 18472-13-4 HCAPLUS

CN 1-Piperazineacetamide, 4-[(2-chlorophenyl)phenylmethyl]-N-[(methylamino)carbonyl] - (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Ph} & \\ & | & \\ \text{CH} & \text{N} & \text{O} & \text{O} \\ & & || & || \\ \text{C1} & & \text{CH}_2 - \text{C- NH-C- NHMe} \end{array}$$

RN 18472-14-5 HCAPLUS

CN 1-Piperazineacetamide, 4-[(4-chlorophenyl)phenylmethyl]-N-[(methylamino)carbonyl]- (9CI) (CA INDEX NAME)

RN 18472-15-6 HCAPLUS

CN 1-Piperazineacetamide, 4-(diphenylmethyl)- α -methyl-N-[(methylamino)carbonyl]- (9CI) (CA INDEX NAME)

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L12 ANSWER 38 OF 38 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1968:506666 HCAPLUS

DOCUMENT NUMBER: 69:106666

TITLE: Synthesis of 1,4-disubstituted piperazines. II

AUTHOR(S): Verderame, Matthew

CORPORATE SOURCE: Albany Coll. of Pharm., Union Univ., Albany, NY, USA

SOURCE: Journal of Medicinal Chemistry (1968), 11(5), 1090-2

CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 69:106666
GI For diagram(s), see printed CA Issue.

AB Monosubstituted piperazines are treated with alkyl halides and acid halides to give I, where R is H or an alkyl or aralkyl group, and R1 is a carbamoyl, carbamoylmethyl, or aralkyl group. 1-Benzhydryl-4-(2,3-dihydroxypropyl)piperazine protects mice against electroshock, and the following I (R and R1 given): Ph2CH CH2CBr:CH2; Ph2CH, CH2CONHCONHMe; Ph2CH, CHMeCONHCONHMe; are mild psychomotor stimulants in mice.

IT 18472-12-3P 18472-13-4P 18472-14-5P

18472-15-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and biol. activity of)

RN 18472-12-3 HCAPLUS

CN 1-Piperazineacetamide, 4-(diphenylmethyl)-N-[(methylamino)carbonyl]- (9CI) (CA INDEX NAME)

RN 18472-13-4 HCAPLUS

CN 1-Piperazineacetamide, 4-[(2-chlorophenyl)phenylmethyl]-N-[(methylamino)carbonyl]- (9CI) (CA INDEX NAME)

RN 18472-14-5 HCAPLUS

CN 1-Piperazineacetamide, 4-[(4-chlorophenyl)phenylmethyl]-N-[(methylamino)carbonyl]- (9CI) (CA INDEX NAME)

RN 18472-15-6 HCAPLUS

CN 1-Piperazineacetamide, 4-(diphenylmethyl)- α -methyl-N-[(methylamino)carbonyl]- (9CI) (CA INDEX NAME)

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NSPEC IS RC AT 21

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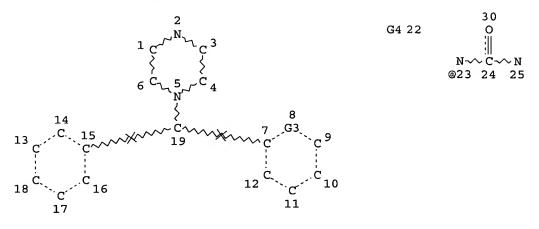
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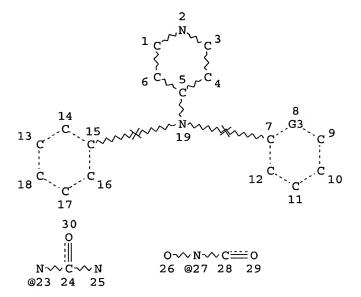


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STEREO ATTRIBUTES: NONE L6 STR

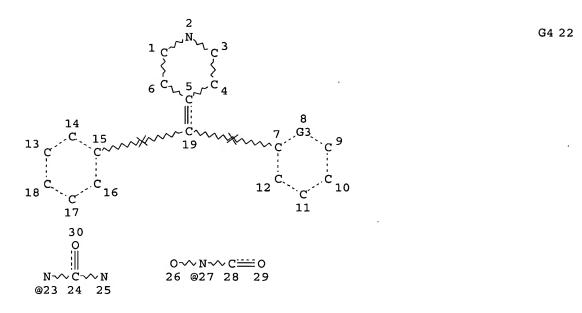


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VAR G4=23/27
NODE ATTRIBUTES:
NSPEC IS RC AT 19
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 28

STEREO ATTRIBUTES: NONE L7 STR

G4 22



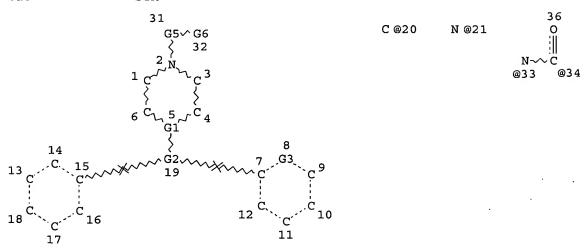
VAR G3=CH/N
VAR G4=23/27
NODE ATTRIBUTES:
NSPEC IS RC AT 19
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 28

STEREO ATTRIBUTES: NONE

L9 1092 SEA FILE=REGISTRY SUB=L4 SSS FUL L5 OR L6 OR L7 L10 STR



0~~C<u></u> 0 37 @38 39

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VAR G2=20/21
VAR G3=CH/N
REP G5 = (0-20) A
VAR G6=33/34/38
NODE ATTRIBUTES:
NSPEC
      IS RC
                  AT 20
NSPEC
       IS RC
                  AT 21
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 29
STEREO ATTRIBUTES: NONE
L11
            561 SEA FILE=REGISTRY SUB=L9 SSS FUL L10
             38 SEA FILE=HCAPLUS ABB=ON PLU=ON L11
L12
L13
            531 SEA FILE=REGISTRY ABB=ON PLU=ON L9 NOT L11
            36 SEA FILE=HCAPLUS ABB=ON PLU=ON L13
L14
             31 SEA FILE=HCAPLUS ABB=ON PLU=ON L14 NOT L12
L15
=>
=>
=> d ibib abs hitstr l15 1-31
L15 ANSWER 1 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                          2005:300395 HCAPLUS
DOCUMENT NUMBER:
                          142:355054
TITLE:
                          Preparation of amide derivatives as inhibitors of
                          histone deacetylase
INVENTOR(S):
                          Moradei, Oscar; Paquin, Isabelle; Leit, Silvana;
                          Frechette, Sylvie; Vaisburg, Arkadii; Besterman,
                          Jeffrey M.; Tessier, Pierre; Mallais, Tammy C.
                          Methylgene, Inc., Can.
PATENT ASSIGNEE(S):
                          PCT Int. Appl., 559 pp.
SOURCE:
                          CODEN: PIXXD2
DOCUMENT TYPE:
                          Patent
LANGUAGE:
                          English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                         KIND
                                 DATE
                                            APPLICATION NO. DATE
     -----
                          ----
                                 -----
                                              ______
                                 20050407 WO 2004-US31591 20040924
     WO 2005030705
                          A1
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             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
```

US 2003-505884P P 20030924 US 2003-532973P P 20031229

SN, TD, TG

PRIORITY APPLN. INFO.:

Ι

US 2004-561082P P 20040409

OTHER SOURCE(S):

MARPAT 142:355054

NH₂

 $\begin{bmatrix} R^5 & 0 \\ N & R^3 \end{bmatrix}$

AB Title compds. I [Ar1 = (un)saturated-, (un)substituted-mono or fused poly-cyclic hydrocarbyl optionally containing 1-4 heteroatoms per ring; R1 = (un)substituted-mono-, -bi-, -tri-cyclic-aryl or -heteroaryl; R2, R3, and R4 independently = H, halo, amino, etc.; R5 and R6 independently = H, alkyl, aryl, etc.; x = 0-1; Y = any pharmaceutically acceptable chemical moiety consisting of 1 to 50 atoms with provisions] and their pharmaceutically acceptable salts, are prepared and disclosed as inhibitors of histone deacetylase. Thus, e.g., II was prepared by Suzuki coupling of 2-bromo-2-nitro-phenylamine (preparation given) with 2-thiopheneboronic acid followed by carbonylation with 4-[3,4-dimethoxy-(phenylamino)-methyl]benzoic acid (preparation given) and subsequent reduction The

inhibitory

capability of I towards antiproliferative activity of histone deacetylase enzyme was evaluated using 3-[4,5-dimethylthiazol-2-yl-2,5-diphenyltetrazolium] bromide (MTT) assay and it revealed that certain compds. of the invention had MTT IC 50 values in the range of below 1 up to 20 $\mu\text{M}.$ I as histone deacetylase inhibitors should prove useful in the treatment of diseases such as, but not limited to, cell proliferative disease, protozoal disease, and fungal disease.

IT 603986-61-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of amide derivs. as inhibitors of histone deacetylase)

RN 603986-61-4 HCAPLUS

CN Benzamide, 2-[4-(diphenylmethyl)-1-piperazinyl]-N-hydroxy-3-nitro- (9CI) (CA INDEX NAME)

C-NH-OH
NO2
CHPh2

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 2 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:300394 HCAPLUS

DOCUMENT NUMBER: 142:373563

TITLE: Preparation of amide derivatives as inhibitors of

histone deacetylase

INVENTOR(S): Moradei, Oscar; Paquin, Isabelle; Leit, Silvana;

Frechette, Sylvie; Vaisburg, Arkadii; Besterman,

Jeffrey M.; Tessier, Pierre; Mallais, Tammy C. Methylgene, Inc., Can.

PATENT ASSIGNEE(S): Methylgene, Inc., Can. SOURCE: PCT Int. Appl., 389 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PAT	ENT I	NO.			KIN) 1	DATE		i	APPL	ICAT:	ION I	. 00		D	ATE	
WO :	2005	0307	04		A1	- :	2005	0407	Ţ	WO 2	004-1	JS31!	590		2	0040:	924
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KΡ,	KR,	KZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ΥU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
		AZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,
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		SN,	TD,	TG													
PRIORITY	APP	LN.	INFO	. :					1	JS 2	003-!	50588	34 P]	P 2	0030	924
									1	JS 2	003-	5329	73P]	P 2	0031	229
									1	JS 2	004-	5610	32P]	P 2	0040	409

OTHER SOURCE(S): MARPAT 142:373563

GΙ

AB Title compds. I [Ar1 = (un)saturated-, (un)substituted-mono or fused poly-cyclic hydrocarbyl optionally containing 1-4 heteroatoms per ring; R1 = (un)substituted-mono-, -bi-, -tri-cyclic-aryl or -heteroaryl; R2, R3, and R4 independently = H, halo, amino, etc.; R5 and R6 independently = H, alkyl, aryl, etc.; x = 0-1; Y = any pharmaceutically acceptable chemical moiety consisting of 1 to 50 atoms with provisions] and their pharmaceutically acceptable salts, are prepared and disclosed as inhibitors of histone deacetylase. Thus, e.g., II was prepared by Suzuki coupling of 2-bromo-2-nitro-phenylamine (preparation given) with 2-thiopheneboronic acid followed by carbonylation with 4-[3,4-dimethoxy-(phenylamino)-methyl]benzoic acid (preparation given) and subsequent reduction The

II

capability of I towards antiproliferative activity of histone deacetylase enzyme was evaluated using 3-[4,5-dimethylthiazol-2-yl-2,5-diphenyltetrazolium] bromide (MTT) assay and it revealed that certain compds. of the invention had MTT IC 50 values in the range of below 1 up to 20 μM . I as histone deacetylase inhibitors should prove useful in the treatment of diseases such as, but not limited to, cell proliferative disease, protozoal disease, and fungal disease.

IT 603986-61-4P

inhibitory

RN

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of amide derivs. as inhibitors of histone deacetylase) 603986-61-4 HCAPLUS

CN Benzamide, 2-[4-(diphenylmethyl)-1-piperazinyl]-N-hydroxy-3-nitro- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 3 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:99177 HCAPLUS

DOCUMENT NUMBER: 142:197868

TITLE: Preparation of derivatives of 3-hydroxypyrrole-2,4-

dicarboxylic acid as antitumor agents

INVENTOR(S): Cholody, Wieslaw M.; Petukhova, Valentina; O'Brien,

Sean; Ohler, Norman; Pikul, Stanislaw

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 46 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	CENT :				KIN	D :	DATE		i	APPL	ICAT:	ION 1	. OI		DA	ATE	
US	2005	0269:			A1	-	2005	0203	1	US 2	003-	6318	- - : 3 7		20	0030	731
WO	2005	0116	75		A1		2005	0210	Ţ	WO 2	004-1	JS24	473		20	040	728
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		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NA,	NI,
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	ŪĠ,	US,	UZ,	VC,	VN,	ΥU,	ZA,	ZM,	zw
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		ΑZ,	BY,	KG,	KZ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
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		SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NΕ,
		SN,	TD,	TG													
RITY APPLN. INFO.:								1	US 2003-631887						0030	731	
R SOURCE(S):				MAR	TAG	142:	1978	68									

PRIOR

OTHER SOURCE(S):

GΙ

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

The title compds. I or II [R1 = H, alkyl, heteroaryl, aryl, etc.; R2 = H, AB alkyl, alkenyl, alkynyl, etc.; R3 = alkyl, heteroaryl; R4 = H, alkyl, heteroaryl, aryl, etc.; R3 and R4 can be connected together to form a 4-7 membered heterocycle; R5 = H, alkyl, heteroaryl, etc.; X, Y = alkyl, alkenyl, alkynyl, etc.; a, b, c = 0-1; including pharmaceutically acceptable salts thereof] that modulate levels of gene expression in

cellular systems, including cancer cells (no data given), are disclosed, along with methods for preparing such agents, as well as pharmaceutical compns. containing such agents as active ingredients and methods of using these as therapeutic agents. E.g., a multi-step synthesis of III.TFA, starting from di-Et 3-hydroxy-1-methyl-1H-pyrrole-2,4-dicarboxylate, was given.

IT 837406-40-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of derivs. of 3-hydroxypyrrole-2,4-dicarboxylic acid as antitumor agents)

RN 837406-40-3 HCAPLUS

CN 1H-Pyrrole-3-carboxamide, 4-[(3,4-dichlorophenyl)methoxy]-5-[[4-(diphenylmethyl)-1-piperazinyl]carbonyl]-N-hydroxy-1-methyl- (9CI) (CA INDEX NAME)

L15 ANSWER 4 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:86449 HCAPLUS

DOCUMENT NUMBER: 142:336330

TITLE: 5-Lipoxygenase inhibition by N-hydroxycarbamates in

dual-function compounds

AUTHOR(S): Lewis, Timothy A.; Bayless, Lynn; DiPesa, Alan J.;

Eckman, Joseph B.; Gillard, Michel; Libertine, Lyn; Scannell, Ralph T.; Wypij, Donna M.; Young, Michelle

Α.

CORPORATE SOURCE: UCB Research, Cambridge, MA, 02139, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (2005),

15(4), 1083-1085

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

GI

AB A series of N-hydroxycarbamates I (R = H2N, MeO, EtO, Me2CHO, Me2CHCH2O, PhCH2O), containing a histaminergic H1 receptor antagonist pharmacophore, was synthesized. In vitro assays determined that these compds. had both histaminergic binding and 5-lipoxygenase inhibiting activities comparable to the corresponding N-hydroxyurea analog. Animal models demonstrated antihistaminergic and the 5-lipoxygenase inhibitory activity, with the N-hydroxyurea analog I (R = H2N) having a better overall profile.

IT 299461-07-7P, UCB 62045 848470-24-6P 848470-26-8P 848470-27-9P 848470-28-0P 848470-29-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study): PREP (Preparation)

(Biological study); PREP (Preparation)
(preparation of (piperazinylalkoxy)phenylalkynyl-substituted
N-hydroxycarbamates and N-hydroxyurea as dual-function
antihistaminergic agents and 5-lipoxygenase inhibitors)

RN 299461-07-7 HCAPLUS

CN Urea, N-[4-[4-[4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]butoxy]phenyl]-3-butynyl]-N-hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-A

HO O

$$C = C - CH_2 - CH_2 - N - C$$

PAGE 1-B

Ι

-NH₂

RN 848470-24-6 HCAPLUS

CN Carbamic acid, [4-[4-[4-[4-[bis(4-fluorophenyl)methyl]-1piperazinyl]butoxy]phenyl]-3-butynyl]hydroxy-, ethyl ester (9CI) (CA
INDEX NAME)

PAGE 1-B

- OEt

RN 848470-26-8 HCAPLUS

CN Carbamic acid, [4-[4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]butoxy]phenyl]-3-butynyl]hydroxy-, 1-methylethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

F

C

$$C = C - CH_2 - CH_2 - N - C$$

PAGE 1-B

- opr-i

RN 848470-27-9 HCAPLUS

CN Carbamic acid, [4-[4-[4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]butoxy]phenyl]-3-butynyl]hydroxy-, methyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

F

$$C = C - CH_2 - CH_2 - N - C$$

F

 $C = C - CH_2 - CH_2 - N - C$

PAGE 1-B

- OMe

RN 848470-28-0 HCAPLUS
CN Carbamic acid, [4-[4-[4-[bis(4-fluorophenyl)methyl]-1 piperazinyl]butoxy]phenyl]-3-butynyl]hydroxy-, 2-methylpropyl ester (9CI)
 (CA INDEX NAME)

PAGE 1-A

F

$$C = C - CH_2 - CH_2 - N - C$$

F

 $C = C - CH_2 - CH_2 - N - C$

PAGE 1-B

— ови-і

RN 848470-29-1 HCAPLUS
CN Carbamic acid, [4-[4-[4-[bis(4-fluorophenyl)methyl]-1 piperazinyl]butoxy]phenyl]-3-butynyl]hydroxy-, phenylmethyl ester (9CI)
 (CA INDEX NAME)

PAGE 1-A

F

$$C = C - CH_2 - CH_2 - N - C$$
 $C = C - CH_2 - CH_2 - N - C$

PAGE 1-B

— o— сн₂— ph

IT 848470-25-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of (piperazinylalkoxy)phenylalkynyl-substituted N-hydroxycarbamates and N-hydroxyurea as dual-function antihistaminergic agents and 5-lipoxygenase inhibitors)

RN 848470-25-7 HCAPLUS

CN Carbamic acid, [4-[4-[4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]butoxy]phenyl]-3-butynyl][[(1-methylethoxy)carbonyl]oxy]-, 1-methylethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

i-Pro-C-0 0

c=c-cH₂-cH₂-N-c

PAGE 1-B

- OPr-i

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 5 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2004:1153108 HCAPLUS

DOCUMENT NUMBER: 142:127171

TITLE: The effect of a novel, dual function histamine H1

receptor antagonist/5-lipoxygenase enzyme inhibitor on

in vivo dermal inflammation and extravasation

AUTHOR(S): Giannaras, Alexander; Selig, William; Ellis, James;

Hullinger, Thomas

CORPORATE SOURCE: Pharmacology Department, UCB Research Inc., Cambridge,

MA, 02139, USA

SOURCE: European Journal of Pharmacology (2005), 506(3),

265-271

CODEN: EJPHAZ; ISSN: 0014-2999

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

Leukotrienes and histamine are thought to play important roles in the AB development of dermatitis. This study evaluated the in vivo efficacy of chlorophenyl) (phenyl) methyl]piperazin-1-yl}ethoxy) benzamide (ucb 35440), a dual function histamine H1 receptor antagonist/5-lipoxygenase enzyme inhibitor, in mouse skin. A single application of phorbol 12-myristate 13-acetate (PMA) was used to induce an acute inflammatory response over a 6-h period. PMA was applied on days 0, 2, 4, 7 and 9 to generate a chronic inflammatory response measured on day 10. ucb 35440 was applied topically at 1 h pre-PMA challenge and 3 h post-PMA challenge in the acute model. In the chronic PMA model, ucb 35440 was applied topically twice a day (AM and PM) on days 7, 8 and 9. Dose-response studies revealed that ucb 35440 inhibited PMA-induced ear weight gain with a 57% inhibition measured using a 3% w/v topical solution in the acute model. The compound appeared less potent in the chronic model with 43% inhibition measured using a 3% w/v topical solution of ucb 35440. Qual. histol. assessment in PMA challenged ears showed that ucb 35440 produced a moderate reduction of polymorphonuclear cell infiltration in the acute model whereas, a more substantial reduction in polymorphonuclear infiltration was noted in the chronic model. In addition, the oral efficacy of ucb 35440 was evaluated in vivo against histamine-induced extravasation in quinea pig skin. Single oral doses of ucb 35440 (10 mg/kg in 0.5% methylcellulose suspension) at 1, 2, 6 or 24 h pre-histamine challenge produced minimal inhibition of histamine-induced extravasation in the dermis. However, when ucb 35440 (10 mg/kg in a 0.5% methylcellulose suspension) was orally administered 24 and 2 h prior to dermal histamine challenge, significant inhibition of extravasation was observed Similar inhibition of histamine-induced extravasation was observed when animals were orally dosed twice a day (AM and PM 10 mg/kg in a 0.5% methylcellulose suspension) for 5.5 days prior to dermal histamine challenge. Collectively, these results suggest that ucb 35440 may represent an important therapeutic class for the treatment of dermatol. inflammatory conditions.

IT **299460-62-1**, UCB 35440

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(effect of a novel, dual function histamine H1 receptor antagonist/5-lipoxygenase enzyme inhibitor ucb 35440 on in vivo dermal inflammation and extravasation)

RN 299460-62-1 HCAPLUS

CN Benzamide, 5-[4-[(aminocarbonyl)hydroxyamino]-1-butynyl]-2-[2-[4-[(R)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]ethoxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

__cl

REFERENCE COUNT:

31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 6 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2004:1016017 HCAPLUS

DOCUMENT NUMBER:

142:6430

TITLE:

Preparation of diarylmethylidene piperidine derivatives as opioid δ receptor ligands for

treating pain, anxiety and functional gastrointestinal

disorders

INVENTOR(S):

Brown, William L.; Griffin, Andrew; Jin, Shujuan Astrazeneca AB, Swed.; Astrazeneca UK Limited

SOURCE:

PCT Int. Appl., 131 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT ASSIGNEE(S):

PAT	PATENT NO.				KIND DATE			APPLICATION NO.						DATE			
						-											
WO :	2004	1015	22		A1		2004	1125	1	WO 2	004-0	GB20	74		20	0040	513
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		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	KZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NA,	NI,
		NO,	NZ,	OM,	PG,	PH,	ΡL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ΥU,	ZA,	ZM,	zw
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
		ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,
		SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,
		SN,	TD,	TG													
PRIORITY	APP:	LN.	INFO	. :					:	SE 2	003-	1444		i	A 20	0030!	516

SE 2004-24

A 20040109

OTHER SOURCE(S):

MARPAT 142:6430

Ι

AB The title compds. [I; R1 = H, (un)substituted alkyl, aryl, etc.; R2-R4 = H, (un)substituted alkyl, cycloalkyl; R7 = H, OH, alkyl, etc.] which are useful in therapy, in particular in the management of pain, were prepared E.g., a multi-step synthesis of I [R1 = H; R2, R3 = Et; R4 = COPh; R7 = H], starting from Me 4-(bromomethyl)benzoate, was given. The compds. I were found to be active toward human δ receptors. Generally, for most of the compds. I the IC50 values are in the range of 0.48 nM to 17.9 nM. The pharmaceutical composition comprising the compound I is disclosed.

IT 798549-35-6P 798549-36-7P 798549-59-4P 798549-60-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of diarylmethylidene piperidine derivs. as opioid δ receptor ligands for treating pain, anxiety and functional gastrointestinal disorders)

RN 798549-35-6 HCAPLUS

CN Benzamide, N, N-diethyl-4-[[2-[[(phenylamino)carbonyl]amino]phenyl]-4-piperidinylidenemethyl]- (9CI) (CA INDEX NAME)

RN 798549-36-7 HCAPLUS

CN Benzamide, N,N-diethyl-4-[[2-[[(phenylamino)carbonyl]amino]phenyl]-4piperidinylidenemethyl]-, trifluoroacetate (10:19) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-35-6 CMF C30 H34 N4 O2

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 798549-59-4 HCAPLUS

CN Benzamide, N,N-diethyl-4-[[2-[[[(phenylmethyl)amino]carbonyl]amino]phenyl]-4-piperidinylidenemethyl]- (9CI) (CA INDEX NAME)

RN 798549-60-7 HCAPLUS

CN Benzamide, N,N-diethyl-4-[[2-[[[(phenylmethyl)amino]carbonyl]amino]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (5:6) (9CI) (CA INDEX NAME)

CM 1

CRN 798549-59-4 CMF C31 H36 N4 O2

CM 2

CRN 76-05-1 CMF C2 H F3 O2

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 7 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:878375 HCAPLUS

DOCUMENT NUMBER: 141:350047

TITLE: Preparation of phospholipase C inhibitors for use in

treating inflammatory diseases Lagu, Bharat; Rupert, Kenneth; Wachter, Michael INVENTOR(S):

PATENT ASSIGNEE(S): Janssen Pharmaceutica N.V., Belg.

SOURCE: PCT Int. Appl., 114 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE			
WO 2004089901 WO 2004089901	A2 20041021 A3 20041209	WO 2004-US9847	20040331			
W: AE, AG, AL, CN, CO, CR, GE, GH, GM,	AM, AT, AU, AZ, CU, CZ, DE, DK, HR, HU, ID, IL,	BA, BB, BG, BR, BW, BY, DM, DZ, EC, EE, EG, ES, IN, IS, JP, KE, KG, KP, MD, MG, MK, MN, MW, MX,	FI, GB, GD, KR, KZ, LC,			

NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 2004242639 **A1** 20041202 US 2004-814070

PRIORITY APPLN. INFO.:

US 2003-459078P

20040331 P 20030331

OTHER SOURCE(S):

MARPAT 141:350047

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

This invention is directed to heterocyclyl-substituted anilino AB phospholipase C inhibitor compds. I [X = (un) substituted-amino, -heterocyclyl, etc.; R3 = O or S; R4 = cycloalkyl, benzofused dioxolyl, benzofused dioxinyl, or aryl; L = a bond or a linking group; R5 = (un)substituted-alkyl, -cycloalkyl, or -aryl; Y = (un)substituted-alkyl; n = 1-2] useful in treating or ameliorating an inflammatory disorders and/or restenosis and enantiomers, diastereomers and pharmaceutically acceptable salts thereof. For example, compound II were prepared in a multi-steps employing a solid phase synthesis starting from 4-fluoro-3-nitrobenzoic acid. The latter inhibits phospholipase $C-\beta 2$ with an IC50 = 3.4 μΜ.

IT 775349-79-6P

> RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of ureido piperidinyl derivative as phospholipase c inhibitors

for

treatment of inflammatory disorders)

RN775349-79-6 HCAPLUS

CN Piperazine, 1-[4-[4-(diphenylmethylene)-1-piperidinyl]-3-[[(phenylamino)carbonyl]amino]benzoyl] - (9CI) (CA INDEX NAME)

L15 ANSWER 8 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2004:863110 HCAPLUS

DOCUMENT NUMBER:

142:16224

TITLE:

Cetirizine and loratadine-based antihistamines with

5-lipoxygenase inhibitory activity

AUTHOR (S):

Lewis, Timothy A.; Young, Michelle A.; Arrington, Mark P.; Bayless, Lynn; Cai, Xiong; Collart, Philippe; Eckman, Joseph B.; Ellis, James L.; Ene, Doina G.;

Libertine, Lyn; Nicolas, Jean-Marie; Scannell, Ralph

T.; Wels, Bruce F.; Wenberg, Karen; Wypij, Donna M.

CORPORATE SOURCE: UCB Research, Cambridge, MA, 02139, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (2004),

14(22), 5591-5594

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 142:16224

AB A series of compds. possessing both H1 histamine receptor antagonist and 5-lipoxygenase (5-LO) inhibitory activities was synthesized. The H1-binding scaffolds of cetirizine, efletirizine, and loratadine were linked to a lipophilic N-hydroxyurea, the 5-LO inhibiting moiety of zileuton. Both activities were observed in vivo, as was increased CYP3A4 inhibition compared to their resp. single-function drugs. Selected

analogs in the series were shown to be orally active in guinea pig models.

IT 299460-35-8P 299460-59-6P 299460-79-0P 299460-95-0P 299461-00-0P 299461-07-7P

RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(cetirizine and loratadine-based antihistamines with lipoxygenase inhibitory activity)

RN 299460-35-8 HCAPLUS

CN Urea, N-[4-[4-[2-[4-[(R)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]ethoxy]phenyl]-3-butynyl]-N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

RN 299460-59-6 HCAPLUS

CN Urea, N-[4-[4-[2-[4-(8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)-1-piperidinyl]ethoxy]phenyl]-3-butynyl]-N-hydroxy(9CI) (CA INDEX NAME)

$$\begin{array}{c} C1 \\ CH_2 \\ CH_2 \\ CH_2 \\ O \\ O \\ H_2N-C-N-CH_2-CH_2-C \\ \hline \end{array}$$

RN 299460-79-0 HCAPLUS

CN Urea, N-[4-[4-[3-[4-[(R)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]propoxy]phenyl]-3-butynyl]-N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$Ph$$
 $C = C$
 $C = C$
 $C = C$
 $C = C$

PAGE 1-B

__{C1}

RN 299460-95-0 HCAPLUS
CN Urea, N-[4-[4-[4-[4-[(R)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]butoxy]phenyl]-3-butynyl]-N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A
Ph
C=C
CH2)4

PAGE 1-B

^cl

RN 299461-00-0 HCAPLUS

OH

CN Urea, N-[4-[4-[4-[4-(8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)-1-piperidinyl]butoxy]phenyl]-3-butynyl]-N-hydroxy-(9CI) (CA INDEX NAME)

C1
$$(CH_2)_4$$

$$(CH_2)_4$$

$$0$$

$$H_2N-C-N-CH_2-CH_2-C=C$$

RN 299461-07-7 HCAPLUS

CN Urea, N-[4-[4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]butoxy]phenyl]-3-butynyl]-N-hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-A

F

$$C = C - CH_2 - CH_2 - N - C$$
 $C = C - CH_2 - CH_2 - N - C$

PAGE 1-B

- nH_2

IT 299460-81-4P 299461-10-2P 802982-16-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(cetirizine and loratadine-based antihistamines with lipoxygenase inhibitory activity)

RN 299460-81-4 HCAPLUS

CN Urea, N-[4-[4-[3-[4-(8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)-1-piperidinyl]propoxy]phenyl]-3-butynyl]-N-hydroxy-(9CI) (CA INDEX NAME)

RN 299461-10-2 HCAPLUS

CN Urea, N-[4-[4-[3-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]propoxy]phenyl]-3-butynyl]-N-hydroxy- (9CI) (CA INDEX NAME)

F

$$C = C - CH_2 - CH_2 - N - C$$
 $C = C - CH_2 - CH_2 - N - C$

PAGE 1-B

-NH₂

RN 802982-16-7 HCAPLUS

CN Urea, N-[4-[4-[2-[4-[bis(4-fluorophenyl)methyl]-1-

piperazinyl]ethoxy]phenyl]-3-butynyl]-N-hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

— NH₂

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 9 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:857583 HCAPLUS

DOCUMENT NUMBER: 141:332220

TITLE: A preparation of (piperazinylphenyl)urea derivatives

as phospholipase C inhibitors, useful for the

treatment of inflammatory disorders

INVENTOR(S): Lagu, Bharat; Wachter, Michael; Rupert, Kenneth;

Wachter, Michael

PATENT ASSIGNEE(S): Janssen Pharmaceutica N.V., Belg.

SOURCE: PCT Int. Appl., 141 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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PATENT NO.
                      KIND
                              DATE
                                        APPLICATION NO. DATE
                        ----
                                        WO 2004-US9846
    WO 2004087685
                        A2
                              20041014
                                                               20040331
    WO 2004087685
                        A3
                              20041216
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
            GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
            LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
            NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
            TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
            BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
            ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
            SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
            TD, TG
    US 2004235855
                                          US 2004-815017
                        A1
                              20041125
                                                                 20040331
                                          US 2003-458938P P 20030331
PRIORITY APPLN. INFO.:
OTHER SOURCE(S): MARPAT 141:332220
GΙ
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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

The invention relates to a preparation of (piperazinylphenyl)urea derivs. of formula I [wherein: X is NH2, NH-alkyl, NHOH, NH-CN, or heterocyclic ring, etc.; Y is one or more (un)substituted alkyl; Z is (CH2)2-5; R1 is (un)substituted alkyl, cycloalkyl, or aryl, etc.; R2 is (un)substituted alkyl, C(O)alkyl, C(O)alkenyl, aryl, or cycloalkyl, etc.; R3 is O or S], useful as PLC-β2 inhibitors. For instance, (piperazinylphenyl)urea derivative II (IC50 = 1.2 μM) was prepared via addition of resin-bound (piperazinylphenyl)amine derivative III to Ph-N=C=O and subsequent resin cleavage (example 1).

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ΙT
    773882-10-3P 773882-13-6P 773882-14-7P
    773882-15-8P 773882-16-9P 773882-17-0P
    773882-18-1P 773882-19-2P 773882-20-5P
    773882-21-6P 773882-22-7P 773882-23-8P
    773882-24-9P 773882-25-0P 773882-26-1P
    773882-27-2P 773882-28-3P 773882-29-4P
    773882-32-9P 773882-33-0P 773882-34-1P
    773882-35-2P 773882-36-3P 773882-37-4P
    773882-38-5P 773882-39-6P 773882-40-9P
    773882-41-0P 773882-42-1P 773882-43-2P
    773882-44-3P 773882-45-4P 773882-46-5P
    773882-47-6P 773882-48-7P 773882-49-8P
    773882-50-1P 773882-52-3P 773882-66-9P
    773882-67-0P 773882-68-1P 773882-69-2P
    773882-70-5P 773882-71-6P 773882-72-7P
    773882-73-8P 773882-74-9P 773882-76-1P
    773882-85-2P 773882-86-3P 773882-87-4P
    773882-88-5P
```

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of (piperazinylphenyl)urea derivs. useful as PLC- β 2 inhibitors)

RN 773882-10-3 HCAPLUS

CN Benzamide, 4-[4-(diphenylmethyl)-1-piperazinyl]-3[[(phenylamino)carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 773882-13-6 HCAPLUS

CN Benzamide, 4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]-3[[(phenylamino)carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 773882-14-7 HCAPLUS

CN Benzamide, 4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]-3-[[[(2-fluorophenyl)amino]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 773882-15-8 HCAPLUS

CN Benzamide, 4-[4-(diphenylmethyl)-1-piperazinyl]-3-[[[(4-nitrophenyl)amino]carbonyl]amino]- (9CI) (CA INDEX NAME)

$$H_2N-C$$
 $NH-C-NH$
 $CHPh_2$

RN 773882-16-9 HCAPLUS

CN Benzamide, 4-[4-(diphenylmethyl)-1-piperazinyl]-3[[[(phenylmethyl)amino]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 773882-17-0 HCAPLUS

CN Benzamide, 3-[[[(3,5-dimethylphenyl)amino]carbonyl]amino]-4-[4-(diphenylmethyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)

$$H_2N-C$$
 $NH-C-NH$
 Me
 $NH-C-NH$
 Me
 $NH-C-NH$

RN 773882-18-1 HCAPLUS

CN Benzamide, 4-[4-(9H-fluoren-9-yl)-1-piperazinyl]-3-[[(phenylamino)carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 773882-19-2 HCAPLUS

CN Benzamide, 3-[[(cyclohexylamino)carbonyl]amino]-4-[4-(diphenylmethyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)

RN 773882-20-5 HCAPLUS

CN Benzamide, 4-[4-(diphenylmethyl)-1-piperazinyl]-3-[[[(1S)-1-phenylethyl]amino]carbonyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 773882-21-6 HCAPLUS

CN Benzamide, 3-[[(butylamino)carbonyl]amino]-4-[4-(diphenylmethyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)

RN 773882-22-7 HCAPLUS

CN Benzamide, 4-[4-(diphenylmethyl)-1-piperazinyl]-3-[[[(4-fluorophenyl)amino]carbonyl]amino]- (9CI) (CA INDEX NAME)

$$H_2N-C$$
 $NH-C-NH$
 $CHPh_2$

RN 773882-23-8 HCAPLUS

CN Benzamide, 3-[[(1,3-benzodioxol-5-ylamino)carbonyl]amino]-4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)

RN 773882-24-9 HCAPLUS

CN Benzamide, 4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]-3-[[[(2,4-dimethylphenyl)amino]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 773882-25-0 HCAPLUS

CN Benzamide, 4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]-3-[[[(1-phenylethyl)amino]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 773882-26-1 HCAPLUS

CN Benzamide, 4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]-3-[[[(2-methoxyphenyl)amino]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 773882-27-2 HCAPLUS

CN Benzamide, 4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]-3-[[[(2,4-dimethoxyphenyl)amino]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 773882-28-3 HCAPLUS

CN Benzamide, 4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]-3-[[[[4-(dimethylamino)phenyl]amino]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 773882-29-4 HCAPLUS

CN Benzamide, 4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]-3-[[[(4-methoxyphenyl)amino]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 773882-32-9 HCAPLUS

CN Piperazine, 1-[4-[4-(diphenylmethyl)-1-piperazinyl]-3[[(phenylamino)carbonyl]amino]benzoyl]-4-methyl- (9CI) (CA INDEX NAME)

RN 773882-33-0 HCAPLUS

CN 1H-1,4-Diazepine, 1-[4-[4-(diphenylmethyl)-1-piperazinyl]-3-[[(phenylamino)carbonyl]amino]benzoyl]hexahydro- (9CI) (CA INDEX NAME)

RN 773882-34-1 HCAPLUS

CN 1H-1,4-Diazepine, 1-[3-[[(cyclohexylamino)carbonyl]amino]-4-[4-(diphenylmethyl)-1-piperazinyl]benzoyl]hexahydro- (9CI) (CA INDEX NAME)

RN 773882-35-2 HCAPLUS

CN Benzamide, N-(2-aminoethyl)-4-[4-(diphenylmethyl)-1-piperazinyl]-3-[[(phenylamino)carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 773882-36-3 HCAPLUS

CN Benzamide, N-(2-aminoethyl)-3-[[(cyclohexylamino)carbonyl]amino]-4-[4-(diphenylmethyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)

$$H_2N-CH_2-CH_2-NH-C$$
 $NH-C-NH$
 $NH-C-NH$
 $NH-C-NH$

RN 773882-37-4 HCAPLUS

CN Piperazine, 1-[3-[[(cyclohexylamino)carbonyl]amino]-4-[4-(diphenylmethyl)-1-piperazinyl]benzoyl]-4-methyl- (9CI) (CA INDEX NAME)

RN 773882-38-5 HCAPLUS

CN Benzamide, N-[2-(dimethylamino)ethyl]-4-[4-(diphenylmethyl)-1-piperazinyl]-3-[[(phenylamino)carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 773882-39-6 HCAPLUS

CN Benzamide, 3-[[(cyclohexylamino)carbonyl]amino]-N-[2-(dimethylamino)ethyl]-4-[4-(diphenylmethyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)

$$Me_2N-CH_2-CH_2-NH-C$$
 $NH-C-NH$
 $NH-C-NH$
 $NH-C-NH$

RN 773882-40-9 HCAPLUS

CN 1H-1,4-Diazepine, 1-[3-[[(cyclohexylamino)carbonyl]amino]-4-[4-(diphenylmethyl)-1-piperazinyl]benzoyl]hexahydro-4-methyl- (9CI) (CA INDEX NAME)

RN 773882-41-0 HCAPLUS

CN L-Leucine, N-[4-[4-(diphenylmethyl)-1-piperazinyl]-3-[[(phenylamino)carbonyl]amino]benzoyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 773882-42-1 HCAPLUS

CN Piperazine, 1-[3-[[(cyclohexylamino)carbonyl]amino]-4-[4-(diphenylmethyl)-1-piperazinyl]benzoyl]- (9CI) (CA INDEX NAME)

RN 773882-43-2 HCAPLUS
CN Piperazine, 1-[4-[4-(diphenylmethyl)-1-piperazinyl]-3[[[(phenylmethyl)amino]carbonyl]amino]benzoyl]- (9CI) (CA INDEX NAME)

RN 773882-44-3 HCAPLUS
CN Piperazine, 1-[4-[4-(diphenylmethyl)-1-piperazinyl]-3[[(phenylamino)carbonyl]amino]benzoyl]- (9CI) (CA INDEX NAME)

RN 773882-45-4 HCAPLUS
CN Piperazine, 1-[3-[[[(2,4-dimethylphenyl)amino]carbonyl]amino]-4-[4-(diphenylmethyl)-1-piperazinyl]benzoyl]- (9CI) (CA INDEX NAME)

RN 773882-46-5 HCAPLUS

CN Piperazine, 1-[3-[[[(3,5-dimethylphenyl)amino]carbonyl]amino]-4-[4-(diphenylmethyl)-1-piperazinyl]benzoyl]- (9CI) (CA INDEX NAME)

RN 773882-47-6 HCAPLUS

CN Piperazine, 1-[4-[4-(diphenylmethyl)-1-piperazinyl]-3-[[[(4-methoxyphenyl)amino]carbonyl]amino]benzoyl]- (9CI) (CA INDEX NAME)

RN 773882-48-7 HCAPLUS
CN Piperazine, 1-[4-[4-(9H-fluoren-9-yl)-1-piperazinyl]-3[[(phenylamino)carbonyl]amino]benzoyl]- (9CI) (CA INDEX NAME)

RN 773882-49-8 HCAPLUS
CN Piperazine, 1-[4-[4-[(4-chlorophenyl)phenylmethyl]-1-piperazinyl]-3[[(cyclohexylamino)carbonyl]amino]benzoyl]- (9CI) (CA INDEX NAME)

RN 773882-50-1 HCAPLUS

CN Piperazine, 1-[4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]-3-[[(phenylamino)carbonyl]amino]benzoyl]- (9CI) (CA INDEX NAME)

RN 773882-52-3 HCAPLUS

CN Piperazine, 1-[4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]-3-[[(cyclohexylamino)carbonyl]amino]benzoyl]- (9CI) (CA INDEX NAME)

RN 773882-66-9 HCAPLUS

CN Piperazine, 1-[3-[[(butylamino)carbonyl]amino]-4-[4-(diphenylmethyl)-1-piperazinyl]benzoyl]- (9CI) (CA INDEX NAME)

RN 773882-67-0 HCAPLUS
CN Piperazine, 1-[4-[4-(diphenylmethyl)-1-piperazinyl]-3-[[[(2-fluorophenyl)amino]carbonyl]amino]benzoyl]- (9CI) (CA INDEX NAME)

RN 773882-68-1 HCAPLUS
CN Piperazine, 1-[3-[[[4-(dimethylamino)phenyl]amino]carbonyl]amino]-4-[4-(diphenylmethyl)-1-piperazinyl]benzoyl]- (9CI) (CA INDEX NAME)

RN 773882-69-2 HCAPLUS

CN Piperazine, 1-[4-[4-(diphenylmethyl)-1-piperazinyl]-3-[[[(2-methoxyphenyl)amino]carbonyl]amino]benzoyl]- (9CI) (CA INDEX NAME)

RN 773882-70-5 HCAPLUS

CN Piperazine, 1-[4-[4-[(4-chlorophenyl)phenylmethyl]-1-piperazinyl]-3-[[(phenylamino)carbonyl]amino]benzoyl]- (9CI) (CA INDEX NAME)

RN 773882-71-6 HCAPLUS

CN 2-Propenamide, N-[[[2-[4-(diphenylmethyl)-1-piperazinyl]-5-(1-piperazinylcarbonyl)phenyl]amino]carbonyl]-3-phenyl-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 773882-72-7 HCAPLUS

CN Piperazine, 1-[3-[[(1,1-dimethylethyl)amino]carbonyl]amino]-4-[4-(diphenylmethyl)-1-piperazinyl]benzoyl]- (9CI) (CA INDEX NAME)

Ph₂CH

RN 773882-73-8 HCAPLUS

CN Piperazine, 1-[3-[[(cyclopentylamino)carbonyl]amino]-4-[4-(diphenylmethyl)-1-piperazinyl]benzoyl]- (9CI) (CA INDEX NAME)

RN

773882-74-9 HCAPLUS
Piperazine, 1-[4-[4-(diphenylmethyl)-1-piperazinyl]-3-[[[[(1S)-1-CN phenylethyl]amino]carbonyl]amino]benzoyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN773882-76-1 HCAPLUS

Piperazine, 1-[4-[4-(diphenylmethyl)-1-piperazinyl]-3-[[[(1-CNmethylethyl)amino]carbonyl]amino]benzoyl]- (9CI) (CA INDEX NAME)

RN773882-85-2 HCAPLUS

CNPiperazine, 1-[3-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]-4[[(phenylamino)carbonyl]amino]benzoyl] - (9CI) (CA INDEX NAME)

RN 773882-86-3 HCAPLUS

CN Piperazine, 1-[3-[4-(diphenylmethyl)-1-piperazinyl]-4[[(phenylamino)carbonyl]amino]benzoyl]- (9CI) (CA INDEX NAME)

RN 773882-87-4 HCAPLUS

CN Piperazine, 1-[4-[[(cyclohexylamino)carbonyl]amino]-3-[4-(diphenylmethyl)-1-piperazinyl]benzoyl]- (9CI) (CA INDEX NAME)

RN 773882-88-5 HCAPLUS

CN Benzamide, 3-[4-(diphenylmethyl)-1-piperazinyl]-4[[(phenylamino)carbonyl]amino]- (9CI) (CA INDEX NAME)

L15 ANSWER 10 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

PATENT ASSIGNEE(S):

2004:857558 HCAPLUS

DOCUMENT NUMBER:

141:350197

TITLE:

Preparation of phospholipase c inhibitors for use in

INVENTOR(S):

treating inflammatory disorders
Lagu, Bharat; Rupert, Kenneth; Wachter, Michael

Janssen Pharmaceutica N.V., Belg.

SOURCE:

GΙ

PCT Int. Appl., 98 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATEN	PATENT NO.				D	DATE		i	APPL	ICAT:	ION I	NO.		D	ATE	
WO 20	 040876	 54		A2	-	2004	- 1014	1	WO 2	 004-1	 JS98:	 39		2	0040	 331
WO 20	040876	54		A3		2005	0127									
W	: AE,	AG,	ΑL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	KZ,	LC,
	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	ŞL,	SY,
	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	ŪĠ,	US,	UΖ,	VC,	VN,	ΥU,	ZA,	ZM,	zw
R	W: BW,	GH,	GM,	KΕ,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	ŪĠ,	ZM,	ZW,	AM,	ΑZ,
	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	ΒE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,
	ES,	FI,	FR,	GB,	GR,	ΗU,	ΙE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,
	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,
	TD,	TG														
US 20	042358	27		A1		2004	1125	1	US 2	004-	8150	48		2	0040	331
PRIORITY A	PPLN.	INFO	.:					1	US 2	003-	4590	67P	:	P 2	0030	331
OTHER SOUR	THER SOURCE(S):			MAR	PAT	141:	3501	97								
GI																

$$\begin{array}{c|c}
L^2 \\
NH & Y \\
N-R^5 \\
(CH_2)_n & I
\end{array}$$

This invention is directed to preparation of heterocyclyl-substituted anilino phospholipase C inhibitor compds. I [L1 = (un)substituted-alkyl, -heterocyclic carbonyl, -alkylsulfonyl, etc.; L2 = (un)substituted-alkyl, -alkylsulfonyl, -N-alkylamide, etc.; R5 = (un)substituted-alkyl, -cycloalkyl, -aryl; Y = one or more optionally present (un)substituted alkyl substituents; n = 1-2] useful in treating or ameliorating an inflammatory disorders and/or restenosis and enantiomers, diastereomers and pharmaceutically acceptable salts thereof. Thus, e.g., II was prepared in six steps employing a solid phase synthesis starting from piperazine (47% yield). Solution phase methods for preparing I are also presented. I possessed IC50 values ranging from 8.7 to >25 μM. The present invention is further directed to pharmaceutical compns. comprising the compds. of the present invention and to methods for treating conditions affected by phospholipase modulation.

IT 774582-91-1P

CN

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(solution phase synthesis of piperazinyl derivs. and analogs thereof as phospholipase C inhibitors for treatment of inflammatory disorders)

RN 774582-91-1 HCAPLUS

Benzoic acid, 4-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]-3[[(phenylamino)carbonyl]amino]-, methyl ester (9CI) (CA INDEX NAME)

IT 774582-89-7P 774582-90-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(solution phase synthesis of piperazinyl derivs. and analogs thereof as phospholipase C inhibitors for treatment of inflammatory disorders)

RN 774582-89-7 HCAPLUS

CN Urea, N-[2-[4-(diphenylmethyl)-1-piperazinyl]-5-(methylsulfonyl)phenyl]-N'-phenyl- (9CI) (CA INDEX NAME)

RN 774582-90-0 HCAPLUS

CN Urea, N-[2-[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]-5-(hydroxymethyl)phenyl]-N'-phenyl- (9CI) (CA INDEX NAME)

L15 ANSWER 11 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:633909 HCAPLUS

DOCUMENT NUMBER: 141:157138

TITLE: Preparation of piperazine derivatives and their use as

synthesis intermediates

INVENTOR(S): Ates, Celal; Cavoy, Emile; Bouvy, Didier

Pryor 10 637163-history.trn

PATENT ASSIGNEE(S): Ucb Farchim Sa, Switz. SOURCE: PCT Int. Appl., 18 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.				KIN	D	DATE		APPLICATION NO.						D	ATE			
						-									-		CA, CH, GB, GD, KZ, LC, NA, NI 040120 040120 MC, PT,		
WC	2004	0653	60		A2		2004	0805	1	WO 2	004-	EP39	9		2	0040	120		
WC	2004	0653	60		A3		2004	1111											
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,		
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,		
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KZ,	LC,		
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI		
CA	2514	145			AA		2004	0805	(CA 2	004-	2514	145		2	0040	120		
EF	1590	323			A2		2005	1102		EP 2	004-	7033	67		2	0040	120		
	R:	ΑT,	BE,	CH,	DΕ,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,		
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	ΑL,	TR,	BG,	CZ,	EE,	HU,	SK			
NC	2005	0039	10		Α		2005	1021]	NO 2	005-	3910			2	0050	822		
PRIORIT	Y APP	LN.	INFO	. :						EP 2	003-	1565		7	A 2	0030	123		
									1	WO 2	004-	EP39	9	1	₩ 2	0040	120		

OTHER SOURCE(S): MARPAT 141:157138

Ι

GI

AB Enantiomerically pure piperazine derivs. (I; Y = hydroxy, leaving group; n = 1-5), and their use as synthesis intermediates, especially for the preparation of

pharmaceutically active compds. (no data), is described.

IT 299460-62-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of piperazine derivs. and their use as synthesis intermediates) RN 299460-62-1 HCAPLUS

CN Benzamide, 5-[4-[(aminocarbonyl)hydroxyamino]-1-butynyl]-2-[2-[4-[(R)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]ethoxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Pryor 10 637163-history.trn

PAGE 1-B

 $\sim_{\mathtt{Cl}}$

IT 299461-16-8P 728948-87-6P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of piperazine derivs. and their use as synthesis intermediates)

RN 299461-16-8 HCAPLUS

CN Benzamide, 5-[4-[(aminocarbonyl)hydroxyamino]-1-butynyl]-2-[2-[4-[(R)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]ethoxy]-, (2E)-2-butenedioate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 299460-62-1 CMF C31 H34 Cl N5 O4

Absolute stereochemistry.

PAGE 1-B

__cl

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 728948-87-6 HCAPLUS

CN Butanedioic acid, hydroxy-, (2S)-, compd. with N-[4-[4-[2-[4-[(R)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]ethoxy]phenyl]-3-butynyl]-N-hydroxyurea (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 299460-35-8 CMF C30 H33 Cl N4 O3

Absolute stereochemistry.

PAGE 1-B

__c1

CM 2

CRN 97-67-6

CMF C4 H6 O5

Absolute stereochemistry. Rotation (-).

L15 ANSWER 12 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:412931 HCAPLUS

DOCUMENT NUMBER: 140:423708

Preparation of 4-(phenylpiperazinylmethyl)benzamides TITLE:

for treatment of pain, anxiety, or gastrointestinal

disorders

Brown, William; Griffin, Andrew INVENTOR(S):

Astrazeneca AB, Swed. PATENT ASSIGNEE(S): PCT Int. Appl., 127 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	PATENT NO.					KIND DATE		APPLICATION NO.						D	20031105		
						-									-		
WO	2004	0418	01		A1		2004	0521	1	WO 2	003-	SE17	06		2	0031	105
	W:	ΑE,	AG,	ΑL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	ВG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	GE,
		GH,	GM,	HR,	HU,	ID,	ΙL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,
		LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,
		OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,	TM,
		TN,	TR,	TT,	TZ,	UA,	ŪĠ,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	ZW		
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	ŪĠ,	ZM,	ZW,	AM,	AZ,	BY,
		KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
EP	1562	923			A1		2005	0817		EP 2	003-	7701	97		2	0031	105
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK	
PRIORIT	Y APP	LN.	INFO	. :						SE 2	002-	3302			A 20	0021	107
								WO 2003-SE1706				1					
OTHER S	OTHER SOURCE(S):				MARPAT 140:423708												

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Title compds. I [wherein R1 = (un) substituted alkyl or cycloalkyl(alkyl), (hetero)aryl, R8CO, R8SO2, R8SO, R8NHCO, R8CS, or R8NHCS; ; R2 = H or (un) substituted alkyl; R3 = H or (un) substituted alkoxycarbonyl, alkyl, or cycloalkyl(alkyl); R8 = (un)substituted alkyl, (hetero)aryl(alkyl), or cycloalkyl(alkyl); or pharmaceutically acceptable salts thereof] were prepared as opioid δ receptor ligands. For example, amidation of 4-iodobenzoyl chloride with Et2NH using TEA in CH2Cl2 provided 4-iodo-N,N-diethylbenzamide, which was coupled with 3-nitrobenzaldehyde in

Pryor 10_637163-history.trn

the presence of BuLi in THF to give 4-[hydroxy(3-nitrophenyl)methyl]-N,N-diethylbenzamide (50%). Reaction with thionyl bromide in CH2Cl2, followed by substitution with piperazine in MeCN and enantiomeric separation using di-p-toluoyl-D-tartaric acid, afforded N,N-diethyl-4-[(S)-(3-nitrophenyl)(1-piperazinyl)methyl]benzamide. N-protection with di-tert-Bu dicarbonate, alkylation with 2-thiazolecarboxaldehyde in the presence of Na triacetoxyborohydride in ClCH2CH2Cl, and deprotection using TFA gave (S)-II. In binding assays using human 293S cells expressing cloned human opioid receptors and neomycin resistance, most compds. of the invention exhibited activity toward the δ receptor with IC50 values in the range of 0.15 nM - 30.4 nM with an average of 2.30 nM. Exemplified compds. also showed some activity toward the κ and μ receptors with IC50 values in the ranges of 320 nM - 8457 nM and 16 nM - 9560 nM, resp. Thus, I and their pharmaceutical compns. are useful in therapy, in particular for the treatment of gastrointestinal disorders, anxiety, or pain (no data).

IT 691878-90-7P, (R)-4-[[3-[(Anilinocarbonyl)amino]phenyl](piperazin1-yl)methyl]-N,N-diethylbenzamide trifluoroacetate (1:2)
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); RACT (Reactant or reagent); USES (Uses)

(δ receptor agonist; preparation of (phenylpiperazinylmethyl)benzamide s as δ receptor agonists for treatment of pain, anxiety, or gastrointestinal disorders)

RN 691878-90-7 HCAPLUS

Benzamide, N,N-diethyl-4-[(R)-[3-[[(phenylamino)carbonyl]amino]phenyl]-1-piperazinylmethyl]-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CN

CRN 691878-12-3 CMF C29 H35 N5 O2

Absolute stereochemistry. Rotation (-).

CM 2

CRN 76-05-1 CMF C2 H F3 O2

691878-12-3P, (R)-4-[[3-[(Anilinocarbonyl)amino]phenyl](piperazin-

1-yl) methyl] -N, N-diethylbenzamide

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

 $(\delta \text{ receptor agonist; preparation of (phenylpiperazinylmethyl)} benzamide$ s as δ receptor agonists for treatment of pain, anxiety, or gastrointestinal disorders)

691878-12-3 HCAPLUS RN

Benzamide, N,N-diethyl-4-[(R)-[3-[[(phenylamino)carbonyl]amino]phenyl]-1-CN piperazinylmethyl] - (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

L15 ANSWER 13 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: DOCUMENT NUMBER:

2004:412920 HCAPLUS

140:423590

TITLE:

Preparation of 4-(phenylpiperidin-4-

ylidenemethyl) benzamides for treatment of pain,

anxiety, or gastrointestinal disorders

INVENTOR(S):

Brown, William; Griffin, Andrew

PATENT ASSIGNEE(S):

Astrazeneca AB, Swed. PCT Int. Appl., 96 pp.

SOURCE: CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
WO 2004041784	A1 20040521	. WO 2003-SE1705	20031105
W: AE, AG, AL	, AM, AT, AU, AZ,	BA, BB, BG, BR, BY, BZ,	CA, CH, CN,
CO, CR, CU	, CZ, DE, DK, DM,	DZ, EC, EE, EG, ES, FI,	GB, GD, GE,
GH, GM, HR	, HU, ID, IL, IN,	IS, JP, KE, KG, KP, KR,	KZ, LC, LK,

Pryor 10 637163-history.trn

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LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ,
            OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
            TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
            BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
            ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
            TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                               20050831
                                          EP 2003-759165
    EP 1567496
                         A1
                                                                  20031105
           AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
    US 2006014789
                                           US 2005-533838
                         A1
                                20060119
                                                                   20050504
PRIORITY APPLN. INFO.:
                                           SE 2002-3301
                                                               A 20021107
                                                            W 20031105
                                           WO 2003-SE1705
                       MARPAT 140:423590
OTHER SOURCE(S):
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GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

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AB
     Title compds. I [wherein R1 = (un)substituted alkyl, cycloalkyl(alkyl),
     (hetero)aryl, R8CO, R8SO2, R8SO, R8NHCO, R8CS, or R8NHCS; ; R2 = H or
     (un) substituted alkyl; R3 = H or (un) substituted alkoxycarbonyl, alkyl, or
     cycloalkyl(alkyl); R8 = (un)substituted alkyl, (hetero)aryl(alkyl), or
     cycloalkyl(alkyl); or pharmaceutically acceptable salts thereof] were
     prepared as opioid \delta receptor ligands. For example, reaction of
     4-(bromomethyl)benzoic acid Me ester with P(OMe)3, followed by addition of
     1-(tert-butoxycarbonyl)-4-piperidone in the presence of LDA in THF, gave
     4-(4-methoxycarbonylbenzylidene)piperidine-1-carboxylic acid tert-Bu ester
     (35%). Addition of Br2 (78%) and reaction with NaOH in MeOH provided
     4-[bromo(4-carboxyphenyl)methylene]piperidine-1-carboxylic acid tert-Bu
     ester (87%). Conversion to the benzoyl chloride with iso-Bu chloroformate
     and amidation (73%) with Et2NH in the presence of TEA in CH2Cl2, followed
     by coupling with 3-aminophenylboronic acid using Pd(PPh3)4 and Na2CO3 in
     toluene/EtOH/H2O afforded N,N-diethyl-4-[(3-aminophenyl)(piperidin-4-
     ylidene) methyl] benzamide (97%). Alkylation of the amine with benzaldehyde
     and NaBH(OAc)3 in 1,2-dichloroethane gave II. In binding assays using
     human 293S cells expressing cloned human opioid receptors and neomycin
     resistance, most compds. of the invention exhibited activity toward the
     \delta receptor with IC50 values in the range of 0.14 nM - 31.2 nM.
     Exemplified compds. also showed some activity toward the \kappa and \mu
     receptors with IC50 values in the ranges of 36 nM - 9680 nM and 3 nM -
     5975 nM, resp. Thus, I and their pharmaceutical compns. are useful in
     therapy, in particular for the treatment of gastrointestinal disorders,
     anxiety, or pain (no data).
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IT 692246-10-9P 692246-14-3P 692247-11-3P

> RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(& receptor agonist; preparation of (phenylpiperidinylidenemethyl)benz amides as δ receptor agonists for treatment of pain, anxiety, or gastrointestinal disorders)

RN 692246-10-9 HCAPLUS

Benzamide, N,N-diethyl-4-[[3-[[(phenylamino)carbonyl]amino]phenyl]-4-CN piperidinylidenemethyl]-, trifluoroacetate (5:7) (9CI) (CA INDEX NAME)

CM

CRN 692246-08-5

CMF C30 H34 N4 O2

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 692246-14-3 HCAPLUS

CN Benzamide, N,N-diethyl-4-[[3-[[[(phenylmethyl)amino]carbonyl]amino]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (5:7) (9CI) (CA INDEX NAME)

CM 1

CRN 692246-12-1 CMF C31 H36 N4 O2

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 692247-11-3 HCAPLUS

CN Benzamide, N,N-diethyl-4-[[3-[[(methylphenylamino)carbonyl]amino]phenyl]-4-piperidinylidenemethyl]-, trifluoroacetate (5:9) (9CI) (CA INDEX NAME)

CM 1

CRN 692247-09-9 CMF C31 H36 N4 O2

$$\begin{array}{c|c} Ph & O \\ & | & | \\ Me-N-C-NH \\ \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

CN

RN 692246-08-5 HCAPLUS

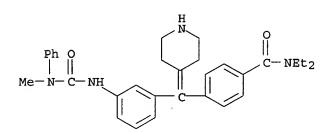
Benzamide, N,N-diethyl-4-[[3-[[(phenylamino)carbonyl]amino]phenyl]-4-piperidinylidenemethyl]- (9CI) (CA INDEX NAME)

RN 692246-12-1 HCAPLUS

CN Benzamide, N,N-diethyl-4-[[3-[[(phenylmethyl)amino]carbonyl]amino]phenyl]-4-piperidinylidenemethyl]- (9CI) (CA INDEX NAME)

RN 692247-09-9 HCAPLUS

CN Benzamide, N,N-diethyl-4-[[3-[[(methylphenylamino)carbonyl]amino]phenyl]-4-piperidinylidenemethyl]- (9CI) (CA INDEX NAME)



L15 ANSWER 14 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:393750 HCAPLUS

DOCUMENT NUMBER: 141:199981

TITLE: Novel dual acting molecules possessing 5-lipoxygenase

enzyme inhibition and histamine H1 receptor antagonist

properties

AUTHOR(S): Scannell, R. T.; Arrington, M. P.; Bayless, L.; Cai,

X.; Eckman, J. B.; Eckert, M.; Ene, D. G.; Ellis, J.

L.; Hussoin, S.; Latham, G. M.; Lewis, T. A.;

Libertine, L.; Nicolas, J.; Selig, W. M.; Schwartz, C.

E.; Wels, B. F.; Wypij, D. M.; Young, M. A.; Zou, D.

CORPORATE SOURCE: UCB Research, Inc., Cambridge, MA, 02139, USA

SOURCE: Inflammation Research (2004), 53 (Suppl. 1), S33-S34

CODEN: INREFB; ISSN: 1023-3830

Pryor 10 637163-history.trn

PUBLISHER: Birkhaeuser Verlag

DOCUMENT TYPE: Journal LANGUAGE: English

AB Novel dual acting mols. possessing 5-lipoxygenase inhibition and histamine

H1 receptor antagonist properties are described.

IT 299460-62-1, UCB 35440

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(dual acting mols. possessing lipoxygenase inhibition and histamine $\mbox{H1}$

receptor antagonist properties)

RN 299460-62-1 HCAPLUS

CN Benzamide, 5-[4-[(aminocarbonyl)hydroxyamino]-1-butynyl]-2-[2-[4-[(R)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]ethoxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

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REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 15 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:303304 HCAPLUS

DOCUMENT NUMBER: 141:46752

TITLE: 5-Lipoxygenase inhibitors with histamine H1 receptor

antagonist activity

AUTHOR(S): Lewis, Timothy A.; Bayless, Lynn; Eckman, Joseph B.;

Ellis, James L.; Grewal, Gurmit; Libertine, Lyn; Nicolas, Jean Marie; Scannell, Ralph T.; Wels, Bruce

F.; Wenberg, Karen; Wypij, Donna M.

CORPORATE SOURCE: UCB Research, Cambridge, MA, 02139, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (2004),

14(9), 2265-2268

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 141:46752

AB A series of novel compds. with both 5-lipoxygenase (5-LO) inhibitory and histamine H1 receptor antagonist activity were designed for the treatment of asthma. These dual-function compds. were made by connecting 5-LO and H1 pharmacophores, N-hydroxyureas and benzhydryl piperazines, resp. A range of in vitro activities was observed, with the furan analog 10 demonstrating both activities in an animal model. The activities observed were compared to single-function drugs.

IT 299460-61-0P 299460-73-4P 299460-87-0P 299461-08-8P 708263-49-4P 708263-50-7P 708263-51-8P

RL: SPN (Synthetic preparation); PREP (Preparation) (5-Lipoxygenase inhibitors with histamine H1 receptor antagonist activity)

RN 299460-61-0 HCAPLUS

CN Urea, N-[4-[5-[[4-[bis(4-fluorophenyl)methyl]-1-piperazinyl]methyl]-2furanyl]-3-butynyl]-N-hydroxy- (9CI) (CA INDEX NAME)

RN 299460-73-4 HCAPLUS

CN Urea, N-[4-[(2S,5S)-5-[[4-[(R)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]methyl]tetrahydro-2-furanyl]-3-butynyl]-N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$H_2N$$
 O
 N
 C
 C
 S
 S
 N
 Ph

RN 299460-87-0 HCAPLUS

CN Urea, N-[4-[(2S,5S)-5-[[4-[bis(4-fluorophenyl)methyl]-1 piperazinyl]methyl]tetrahydro-2-furanyl]-3-butynyl]-N-hydroxy- (9CI) (CA
 INDEX NAME)

Absolute stereochemistry.

$$\begin{array}{c} OH \\ H_2N \\ N \end{array}$$

RN 299461-08-8 HCAPLUS

CN Urea, N-[4-[(2R,5R)-5-[[4-[(R)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]methyl]tetrahydro-2-furanyl]-3-butynyl]-N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 708263-49-4 HCAPLUS

CN Urea, N-[3-[5-[[4-[(S)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]methyl]-2-furanyl]-1-methyl-2-propynyl]-N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 708263-50-7 HCAPLUS

CN Urea, N-[4-[5-[[4-[(S)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]methyl]-2-furanyl]-3-butynyl]-N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$H_2N$$
 OH
 $C \equiv C$
 O
 N
 S
 Ph

RN 708263-51-8 HCAPLUS

CN Urea, N-[[5-[[4-[(S)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]methyl]-2-furanyl]methyl]-N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 16 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:41277 HCAPLUS

DOCUMENT NUMBER: 140:87701

TITLE: Diarylmethylpiperazines as prophylactic or therapeutic

agents for viral myocarditis

INVENTOR(S): Matsumori, Akira; Kouzan, Serge

PATENT ASSIGNEE(S): UCB, S.A., Belg.

SOURCE: PCT Int. Appl., 26 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	TENT	NO.			KIND DATE			APPLICATION NO.						DATE			
						-									-		
WO	2004	0047	28		AΙ		2004	0112	1	WO 2	003-	EP6 /	46		21	0030	526
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	ΚP,	KR,	KZ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,
		PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	TJ,	TM,	TN,	TR,
		TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	ZW				
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	ΚZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
JP	2004	0354	48		A2		2004	0205		JP 2	002-	1938	96		20	0020	702

Pryor 10_637163-history.trn

JP 2004035450 A2 20040205 JP 2002-193901 20020702 EP 1521581 20050413 EP 2003-762520 A1 20030626 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK PRIORITY APPLN. INFO.: JP 2002-193896 A 20020702 JP 2002-193901 Α 20020702 WO 2003-EP6746 W 20030626

AB The invention provides a prophylactic or therapeutic agent for viral myocarditis and viral myocarditis-related viral diseases by preventing or treating the occurrence of cell damage in various organs regardless of the type of virus. A prophylactic or therapeutic agent for viral myocarditis and viral myocarditis-related viral diseases is provided that comprises as an active ingredient 2-[4-(diphenylmethyl)-1-piperazinyl]acetic acid, or an amide derivative, individual optical isomer, or pharmaceutically acceptable salt thereof.

IT 299460-48-3 642928-01-6

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(diarylmethylpiperazines as prophylactic or therapeutic agents for viral myocarditis)

RN 299460-48-3 HCAPLUS

CN Urea, N-[4-[3-[2-[4-[(R)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]ethoxy]phenyl]-3-butynyl]-N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

RN 642928-01-6 HCAPLUS

CN Benzamide, 4-[4-[(aminocarbonyl)hydroxyamino]-1-butynyl]-2-[2-[4-[(R)-(4-chlorophenyl)phenylmethyl]-1-piperazinyl]ethoxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

`C1

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 17 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

6

ACCESSION NUMBER:

2003:737723 HCAPLUS

DOCUMENT NUMBER:

139:261309

TITLE:

Preparation of N-hydroxy-5-piperazino(piperidino or

diazepino) -2-pyrimidinecarboxamides and

N-hydroxy-4-piperazino(piperidino or

diazepino) benzamides as new inhibitors of histone

deacetylase

INVENTOR(S):

Angibaud, Patrick Rene; Pilatte, Isabelle Noeelle Constance; Van Brandt, Sven Franciscus Anna; Roux, Bruno; Ten Holte, Peter; Verdonck, Marc Gustaaf Celine; Meerpoel, Lieven; Dyatkin, Alexey Borisovich

Janssen Pharmaceutica N.V., Belg.

PATENT ASSIGNEE(S):

PCT Int. Appl., 72 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND I	DATE	APPLICATION NO.	DATE
WO 2003076400	A1 2	20030918	WO 2003-EP2514	20030311
W: AE, AG,	L, AM, AT,	AU, AZ, BA,	BB, BG, BR, BY, B	BZ, CA, CH, CN,
CO, CR, C	CU, CZ, DE,	DK, DM, DZ,	EC, EE, ES, FI, G	B, GD, GE, GH,
GM, HR, I	W, ID, IL,	IN, IS, JP,	KE, KG, KP, KR, K	CZ, LC, LK, LR,
LS, LT,	JU, LV, MA,	MD, MG, MK,	MN, MW, MX, MZ, N	IO, NZ, OM, PH,
PL, PT, 1	RO, RU, SC,	SD, SE, SG,	SK, SL, TJ, TM, T	N, TR, TT, TZ,
UA, UG, U	S, UZ, VC,	VN, YU, ZA,	ZM, ZW	
RW: GH, GM, 1	Œ, LS, MW,	MZ, SD, SL,	SZ, TZ, UG, ZM, Z	W, AM, AZ, BY,
KG, KZ, I	ID, RU, TJ,	TM, AT, BE,	BG, CH, CY, CZ, D	DE, DK, EE, ES,
FI, FR, (B, GR, HU,	IE, IT, LU,	MC, NL, PT, RO, S	E, SI, SK, TR,
BF, BJ, (CF, CG, CI,	CM, GA, GN,	GQ, GW, ML, MR, N	IE, SN, TD, TG

CA 2475764	AA	20030918	CA 2003-2475764		20030311
AU 2003218736	A1	20030922	AU 2003-218736		20030311
EP 1485353	A1	20041215	EP 2003-711980		20030311
R: AT, BE, CH,	DE, DK	, ES, FR,	GB, GR, IT, LI, LU, NL,	S	E, MC, PT,
IE, SI, LT,	LV, FI	, RO, MK,	CY, AL, TR, BG, CZ, EE,	H	U, SK
BR 2003008081	Α	20041221	BR 2003-8081		20030311
US 2005107384	A1	20050519	US 2003-506998		20030311
NZ 534834	Α	20050729	NZ 2003-534834		20030311
JP 2005526067	T2	20050902	JP 2003-574621		20030311
NO 2004004194	Α	20041001	NO 2004-4194		20041001
PRIORITY APPLN. INFO.:			US 2002-363799P	P	20020313
			WO 2003-EP2514	W	20030311
OMITED COIDER (C).	MADDAM	120.26126	10		

OTHER SOURCE(S): MARPAT 139:261309

GΙ

$$\begin{array}{c|c}
R^1 & Q = X \\
& Y \\
& R^2
\end{array}$$

$$\begin{array}{c|c}
& R^4 \\
& \downarrow \\
& \downarrow \\
& Z \\
& \downarrow \\
& R^3 \\
& R$$

AB The title compds. [I; n = 0-3; t = 0-4; Q, X, Y = N, C; Z = N, CH; R1 = CONR7R8, NHCOR9, CO(alkanediyl)SR9, etc. (wherein R7, R8 = H, OH, alkyl, etc.; R9 = H, alkyl, alkylcarbonyl, etc.); R2 = H, halo, OH, etc.; L = a bond, alkanediyl, alkanediyloxy, NH, CO, NHCO; each R3 = H and one H atom can be replaced by aryl; R4 = H, OH, NH2, etc.; A = (un)substituted Ph, cyclohexyl, pyridyl, etc.], having histone deacetylase inhibiting enzymic activity, were prepared and formulated. E.g., a multi-step synthesis of II which showed pIC50 of 5.121 against HDAC, was given.

IT 603986-62-5P

II

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of piperazino(piperidino or diazepino) substituted 2-pyrimidinecarbohydroxamic acids and N-hydroxybenzamides as new inhibitors of histone deacetylase)

RN 603986-62-5 HCAPLUS

CN Benzamide, 2-[4-(diphenylmethyl)-1-piperazinyl]-N-hydroxy-3-nitro-,

Pryor 10_637163-history.trn

bis(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 603986-61-4 CMF C24 H24 N4 O4

CM 2

CRN 76-05-1 CMF C2 H F3 O2

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 18 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:282524 HCAPLUS

DOCUMENT NUMBER: 138:304064

TITLE: Preparation of phenylurea derivatives as vanilloid

receptor agonists

INVENTOR(S): Matsumoto, Takahiro; Yamamoto, Masataka; Nagabukuro,

Hiroshi; Mochizuki, Manabu

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 293 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE	E APPLICATIO	ON NO. DATE	
WO 2003029199	A1 2003	30410 WO 2002-JI	P9995 2002092	27
WO 2003029199	C2 2003	30925		
W: AE, AG, AL,	AM, AT, AU,	AZ, BA, BB, BG, I	BR, BY, BZ, CA, CH, C	CN,
CO, CR, CU,	CZ, DE, DK,	DM, DZ, EC, EE, I	ES, FI, GB, GD, GE, G	SH,
GM, HR, HU,	ID, IL, IN,	IS, JP, KE, KG, I	KR, KZ, LC, LK, LR, L	ıS,
LT, LU, LV,	MA, MD, MG,	MK, MN, MW, MX, N	MZ, NO, NZ, OM, PH, P	ΡL,
PT, RO, RU,	SD, SE, SG,	SI, SK, SL, TJ,	rm, <mark>tn, tr, tt, tz, u</mark>	JA,

Pryor 10_637163-history.trn

UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG 20040714 EP 1437344 A1 EP 2002-768103 20020927 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK JP 2004339061 A2 20041202 JP 2002-282514 20020927 US 2004259912 20041223 US 2004-489621 **A1** 20040312 PRIORITY APPLN. INFO.: JP 2001-300564 A 20010928 WO 2002-JP9995 W 20020927 OTHER SOURCE(S): MARPAT 138:304064 GI

The title compds. I [R1, R4 and R6 are each independently hydrogen, halogeno, or hydrocarbyl; R2 is hydrocarbyl or a heterocyclic group; R3 is hydrocarbyl, etc.; R5 is hydrocarbyl or a heterocyclic group (except quinolyl) and R51 is hydrogen or hydrocarbyl, or R5 and R51 together with the nitrogen atom adjacent thereto may form a ring; and R52 is hydrogen or hydrocarbyl] are prepared I are useful for the treatment of pain, urinary incontinence, etc. In a tail flick test using mice, one compound of this invention showed a min. ED of 1 mg/kg.

IT 508217-19-4P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

Ι

(Uses) (preparation of phenylurea derivs. as vanilloid receptor agonists)

RN 508217-19-4 HCAPLUS

CN Piperazine, 1-[2-(diphenylmethoxy)-5-[[(phenylamino)carbonyl]amino]benzoyl]-4-(diphenylmethyl)- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS

Pryor 10 637163-history.trn

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 19 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:43028 HCAPLUS

DOCUMENT NUMBER: 138:106596

TITLE: Preparation of thiophenedicarboxamides and related

compounds as histone deacetylase (HDAC) inhibitors. Leser-Reiff, Ulrike; Sattelkau, Tim; Zimmermann, Gerd

PATENT ASSIGNEE(S): Hoffman-La Roche, Inc., Germany

SOURCE: U.S. Pat. Appl. Publ., 19 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

INVENTOR(S):

	PATENT NO. KIND							APPLICATION NO.							20020611 20020613 20020613 A, CH, CN, D, GE, GH, C, LK, LR, C, OM, PH, R, TT, TZ, M, AZ, BY, FR, GB, C, CM, GA, 20020613 E, MC, PT,			
												002-						
	US	6784	173			B2		2004	0831									
	CA	2449	804			AA		2003	0213	(CA 2	002~	2449	804		2	0020	613
	WO	2003	0118	51		A2		2003	0213	ī	WO 2	002-	EP64	88		2	0020	613
	WO	2003	0118	51		А3		2003	0918									
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
			PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,
			UA,	ŪĠ,	UZ,	VN,	YU,	ZA,	ZM,	ZW								
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
			KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	CH,	CY,	DE,	DK,	ES,	FI,	FR,	GB,
			GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,
			GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG							
	ΕP	1401	824			A2		2004	0331	F	EP 2	002-	7914:	36		2	0020	613
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
			ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR						
	CN	1516	697			Α		2004	0728		CN 2	002-	8120	10		2	0020	613
	BR	2002	0104	24		Α		2004	0817	F	BR 2	002-	10424	4		2	0020	613
	NZ	5298	74			Α		2004	1224	1	NZ 2	002-	5298′	74		2	0020	613
	JP	2005	5026	41		T 2		2005	0127	ć	JP 2	003-	51704	43		2	0020	613
	zA	2003	0092	60		Α		2005	0228	2	ZA 2	003-	9260			2	0031	127
	BG	1084	50			Α		2005	0131	E	BG 2	003-	1084	50		2	0031	215
	US	2004	2148	62		A1		2004	1028	τ	JS 2	004-	8471	66		2	0040	517
PRIOR	RITY	APP	LN.	INFO	. :					I	EP 2	001-	1144	96	7	A 20	0010	615
										τ	JS 2	002-	1676	77	7	A3 2	0020	511
										V	NO 2	002-1	EP648	88	7	W 20	0020	513

OTHER SOURCE(S): MARPAT 138:106596

- AB HONHCOACONR1R2 [A = (substituted) Ph, thienyl; R1, R2 = H, (substituted) alkyl, carbocyclyl, heterocyclyl; NR1R2 = (substituted) 3-6 membered ring], were prepared Thus, thiophene-2,5-dicarboxylic acid monomethyl ester and N-methylmorpholine in CH2Cl2 at -10° were treated with 1-aminomethylnaphthalene in CH2Cl2; the mixture was stirred 90 min to give 58% monoamide. This was stirred with NH2OH.HCl and NaOMe in MeOH for 4 h to give thiophene-2,5-dicarboxylic acid 2-hydroxyamide 5-[(naphthalen-1-ylmethyl)amide]. Tested title compds. inhibited HT-29 tumor cell growth with IC50 = 0.02-0.17 μ M. A tablet formulation is given.
- IT 487002-92-6P 487004-50-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)

(claimed compound; preparation of thiophenedicarboxamides and related compds.

as histone deacetylase (HDAC) inhibitors)

RN 487002-92-6 HCAPLUS

CN 2-Thiophenecarboxamide, 5-[[4-(diphenylmethyl)-1-piperazinyl]carbonyl]-N-hydroxy- (9CI) (CA INDEX NAME)

Ph₂CH

RN 487004-50-2 HCAPLUS

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 20 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:385004 HCAPLUS

DOCUMENT NUMBER: 136:386137

TITLE: Preparation of piperidinylpiperazines as CCR5

chemokine receptor antagonists.

INVENTOR(S): Baroudy, Bahige M.; Clader, John W.; Josien, Hubert

B.; McCombie, Stuart W.; McKittrick, Brian A.; Miller, Michael W.; Neustadt, Bernard R.; Palani, Anandan; Smith, Elizabeth M.; Steensma, Ruo; Tagat, Jayaram R.;

Vice, Susan F.; Gilbert, Eric; Labroli, Marc A.

PATENT ASSIGNEE(S): Schering Corporation, USA

SOURCE: U.S., 72 pp. CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
US 6391865	B1	20020521	US 2000-562814	20000	501
US 2003069252	A1	20030410	US 2002-61011	20020	130
US 6689765	B2	20040210			
US 2004067961	A1	20040408	US 2003-668862	20030	923
PRIORITY APPLN. INFO.:			US 1999-132509P	P 19990	504
			US 2000-562814	A3 20000	501

US 2002-61011

A3 20020130

OTHER SOURCE(S):

MARPAT 136:386137

GΙ

$$R^{6}$$
 R^{5}
 R^{7}
 $R^{1}R^{3}CN$
 N
 R^{6}
 R^{7}
 R^{7}
 R^{7}
 R^{7}

Title compds. [I; R = (substituted) Ph, pyridyl, thienyl, naphthyl; R1 = AΒ H, alkyl; R2 = (substituted) Ph, heteroaryl, naphthyl, fluorenyl, diphenylmethyl, (substituted) phenylalkyl, heteroarylalkyl; R3 = H, alkyl, alkoxyalkyl, cycloalkyl, cycloalkylalkyl, (substituted) Ph, phenylalkyl, naphthyl, naphthylalkyl, heteroaryl, heteroarylalkyl; R4, R5, R7 = H, alkyl; R6 = H, alkyl, alkenyl], were prepared Thus, title compound (II) [preparation starting from (S)-alanine Me ester hydrochloride given] inhibited RANTES binding in a CCR5 membrane binding assay with Ki = 9.97 nM.

306296-55-9P 306296-59-3P IT

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of piperazine derivs. useful as CCR5 antagonists)

RN 306296-55-9 HCAPLUS

CN Piperidine, 4-[(3S)-4-(diphenylmethyl)-3-methyl-1-piperazinyl]-1-[4-[[(ethylamino)carbonyl]amino]-2,6-dimethylbenzoyl]-4-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 306296-59-3 HCAPLUS

CN Piperidine, 4-[(3S)-4-(diphenylmethyl)-3-methyl-1-piperazinyl]-1-[4-[[(ethylamino)carbonyl]methylamino]-2,6-dimethylbenzoyl]-4-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 21 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:315471 HCAPLUS

DOCUMENT NUMBER: 136:325431

TITLE: Preparation of 2-biphenyl 4-piperidinyl ureas having

muscarinic receptor antagonist activity

INVENTOR(S): Mammen, Mathai; Oare, David

PATENT ASSIGNEE(S): Theravance, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 69 pp., Cont.-in-part of U.S.

Ser. No.456,170, abandoned.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 31

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	A1 B2	20020425	US 2000-732514	20001207
US 6693202	В1	20040217	US 2000-645609	
EP 1457488 R: AT, BE, CH,	A1 DE, DK		EP 2004-12859 GB, GR, IT, LI, LU,	20001207 NL, SE, MC, PT,
IE, FI, CY, ES 2225275	TR T3	20050316	ES 2000-982493	20001207
ES 2243333	Т3	20051201	ES 2000-983991	20001207
ZA 2002004553 ZA 2002004557	A A	20030908 20030908	ZA 2002-4553 ZA 2002-4557	20020606 20020606
US 2004110229 US 2004054187	A1 A1	20040610 20040318	US 2003-425368 US 2003-426364	20030429 20030430
US 2004116706 PRIORITY APPLN. INFO.:	A1	20040617	US 2003-426270 US 1999-456170	
PRIORITI APPLIN. INFO.:			US 1999-120287P	P_19990216
			US 1999-325725 US 2000-645609	B2 19990 604 A1 20000825
			EP 2000-982493 US 2000-732514	A3 20001207 A1 20001207
			00 2000 732314	AI 20001207

OTHER SOURCE(S): MARPAT 136:325431

GΙ

$$\begin{array}{c|c}
 & R^1 \\
 & R^2 \\
 & R^2
\end{array}$$

$$\begin{array}{c|c}
 & R^1 \\
 & R^2
\end{array}$$

$$\begin{array}{c|c}
 & B^2
\end{array}$$

AB The title compds. L1XL2 [L1 = I (wherein A = (hetero)aryl; B2 = NRa; Ra = H, alkyl, etc.; R1 = H, alkyl; R2 = heteroaryl, etc.; K1 = a bond, alkylene; K2 = a bond, CO, SOn, etc.; n = 0-2; B = heterocycloamino, heteroarylamino); X = a linker; L2 = an organic group comprising at least one primary, secondary, or tertiary amine] which are muscarinic receptor antagonists and agonists (biol. data given), were prepared and formulated. E.g., a 2-step preparation of the intermediate II [R = H] starting with biphenyl-2-isocyanate and 4-amino-N-benzylpiperidine, was given. Mass spec data for 643 compds. II [R = XL2] such as II [X = CH2CH(OH)CH2; L2 = 4-[2-(N-phenyl-N-methylamino)-2-oxoethyl]piperazin-1-yl], were presented.

344430-17-7P 344431-84-1P 344434-88-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 2-biphenyl 4-piperidinyl ureas having muscarinic receptor antagonist activity)

RN 344430-17-7 HCAPLUS

IT

CN Urea, N-[1,1'-biphenyl]-2-yl-N'-[1-[3-[4-(diphenylmethyl)-1-piperazinyl]propyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

Ι

II

RN 344431-84-1 HCAPLUS

CN Urea, N-[1,1'-biphenyl]-2-yl-N'-[1-[8-[4-(diphenylmethyl)-1-piperazinyl]octyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 344434-88-4 HCAPLUS

CN Urea, N-[1,1'-biphenyl]-2-yl-N'-[1-[9-[4-(diphenylmethyl)-1-piperazinyl]nonyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

L15 ANSWER 22 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:581832 HCAPLUS

DOCUMENT NUMBER: 135:166842

TITLE: Preparation of (1H-indol-5-yl)methanones,

2-(2-fluorophenyl) acetamides and 2-(pyrazol-1-

yl)pyrimidines as InhA inhibitors

INVENTOR(S): Staveski, Mark M.; Sneddon, Scott F.; Yee,

Christopher; Janjigian, Andrew

PATENT ASSIGNEE(S): Genzyme Corporation, USA SOURCE: PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT	PATENT NO.				KIND DATE			APPLICATION NO.					DATE			
	056974				2001			WO 2	001-	US40	045			0010		
WO 2001	056974		A3		2002	0718										
W:	AE, AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,	
	CR, CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	
	HU, ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	
	LU, LV,	ΜA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,	RU,	
	SD, SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,	
	YU, ZA,	ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	ТJ,	TM					
RW:	GH, GM,	KΕ,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	ŪĠ,	ZW,	AT,	BE,	CH,	CY,	
	DE, DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,	
	BJ, CF,	CG,	CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG			
US 6372	752		B1		2002	0416	•	US 2	000-	4991	83		2	0000	207	
PRIORITY APP	LN. INFO	. :					•	US 2	000-	4991	83	1	A1 2	0000	207 -	
OTHER SOURCE	(S):		MAR	PAT	135:	16684	42									

AB The title compds. [I-III, etc.; R1 = (un) substituted heteroaryl, piperazinyl, piperidinyl, etc.; R2 = OH, (un) substituted aryl, cycloalkyl, etc.; n = 1-2; R3 = (un) substituted Ph, heteroaryl; R4 = H, halo, alkyl, etc.] which inhibit the Mycobacterial enoyl-ACP reductase required for cell wall biosynthesis, and are useful for treating a bacterial infection in a patient, were prepared Thus, reacting 2-fluorophenylacetic acid with 4-chlorophenethylamine in the presence of DMAP and EDCI in CH2Cl2 afforded II [R2 = 4-ClC6H4; n = 2] which showed 82% InhA inhibition at 40 μM.

IT 353522-13-1P 353522-66-4P 353522-69-7P 353522-71-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of (1H-indol-5-yl)methanones, 2-(2-fluorophenyl)acetamides and 2-(pyrazol-1-yl)pyrimidines as InhA inhibitors)

RN 353522-13-1 HCAPLUS

CN Piperazine, 1-[2-[[[(2-chlorophenyl)amino]carbonyl]amino]-9H-fluoren-9-yl]-4-(1H-indol-5-ylcarbonyl)- (9CI) (CA INDEX NAME)

RN 353522-66-4 HCAPLUS

CN Piperazine, 1-[2-[[[(3,5-dimethyl-4-isoxazolyl)amino]carbonyl]amino]-9H-fluoren-9-yl]-4-(1H-indol-5-ylcarbonyl)- (9CI) (CA INDEX NAME)

RN353522-69-7 HCAPLUS

Piperazine, 1-[2-[[(ethylamino)carbonyl]amino]-9H-fluoren-9-yl]-4-(1H-CNindol-5-ylcarbonyl) - (9CI) (CA INDEX NAME)

RN

353522-71-1 HCAPLUS Piperazine, 1-(1H-indol-5-ylcarbonyl)-4-[2-[[[(1-CNmethylethyl)amino]carbonyl]amino]-9H-fluoren-9-yl]- (9CI) (CA INDEX NAME)

Pryor 10_637163-history.trn

L15 ANSWER 23 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:435045 HCAPLUS
DOCUMENT NUMBER: 135:46100
TITLE: Preparation of 2-biphenyl 4-piperidinyl ureas having

muscarinic receptor antagonist activity

Mammen, Mathai; Oare, David INVENTOR(S):

PATENT ASSIGNEE(S):

Advanced Medicine, Inc., USA
SOURCE:

PCT Int. Appl., 162 pp. INVENTOR(S):

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 31

PATENT INFORMATION:

		ENT)	DATE			API	PLICAT	CION	NO.		I	DATE	
		2001				A1						2000-					20001	
		W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BE	3, BG,	BR,	BY,	BZ,	CA	CH,	CN,
			CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES	, FI,	GB,	GD,	GE,	GH	GM,	HR,
												, KR,						
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				ZA,	-				,				•				•	•
		RW:				LS.	MW.	MZ.	SD.	SL.	SZ	z, TZ,	UG.	ZW.	AT.	BE	CH.	CY.
												r, LU,						
				-	-			-	-			, MR,					,	,
τ	IS	6693		/	,	B1						2000-			,		20000	825
								2001	0614		CA	2000-	2392	030				
,	RR	2000	0159	63		A		2002	0806		BR	2000- 2000-	1596	3		-	20001	207
7	EP	2392 2000 1235	803			A1		2002	0904		EP	2000-	9824	93			20001	
		1235				B1		2004								_		_ • /
•		R:		BE.	CH.						GF	R, IT,	T ₁ T ₁	TIII.	NI.	SE	MC.	PT.
									•	•		TR	,	_,	,		,	,
i.	TP	2003				T2						2001-	5435	14		:	20001	207
		5187				A		2004	0326		N7.	2000-	5187	22			20001	
		2710				E		2004	0715		AΤ	2000- 2000-	9824	93			20001	
		1457				Ā1		2004	0915		EP	2004-	1285	9			20001	
•	-~			BE.	CH.							R, IT,			NI.			
			-	FI,		-	211,	,	,	,	-	.,,	,	,			,	,
I	ES	2225	275			Т3		2005	0316		ES	2000-	9824	93		:	20001	207
I	UA	7822	32			B2		2005	0714		ΑU	2001-	1951	8		:	20001	207
I	ES	2243 2002 2002 2002	333			Т3		2005	1201		ES	2000-	9839	91		2	20001	207
1	OV	2002	0026	83		Α		2002	0702		NO	2002-	2683			2	20020	606
2	ZΑ	2002	0045	53		Α		2003	0908		ZA	2002 - 2002 - 2002 -	4553			2	20020	606
2	ZA	2002	0045	57		Α		2003	0908		ZA	2002-	4557			:	20020	606
		1049				A1		2005	0218		НK	2003-	1015	72		2	20030	303
Ţ	JS	2004	1102	29		A1		2004	0610			2003-					20030	429
PRIOR	ΙTΊ	APP	LN.	INFO	. :						US	1999-	4561	70		A2 :	19991	207
												1999-					19990	
											US	1999-	3257	25		B2 :	19990	604
											HS	2000-	6456	กษ		A 1 :	20000	825
											ΕP	2000-	9824				20001	207
												2000-					20001	
OTHER	SC	URCE	(s) ·			MARI	тαс	135	4610	0								

OTHER SOURCE(S): MARPAT 135:46100

GI

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O N R

AB The title compds. L1XL2 [I; L1 = II (wherein A = (hetero)aryl; B2 = NRa; Ra = H, alkyl, etc.; R1 = H, alkyl; R2 = heteroaryl, etc.; K1 = a bond, alkylene; K2 = a bond, CO, SOn, etc.; n = 0-2; B = heterocycloamino, heteroarylamino); X = a linker; L2 = an organic group comprising at least one primary, secondary, or tertiary amine] which are muscarinic receptor antagonists and agonists (biol. data given), were prepared and formulated. E.g., a 2-step preparation of the intermediate III [R = H] starting with biphenyl-2-isocyanate and 4-amino-N-benzylpiperidine, was given. Mass spec data for 643 compds. III [R = XL2] were presented.

IT 344430-17-7P 344431-84-1P 344434-88-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 2-biphenyl 4-piperidinyl ureas having muscarinic receptor antagonist activity)

RN 344430-17-7 HCAPLUS

CN Urea, N-[1,1'-biphenyl]-2-yl-N'-[1-[3-[4-(diphenylmethyl)-1-piperazinyl]propyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

ΙΙ

III

Ph₂CH
$$N \longrightarrow NH \longrightarrow C-NH$$

RN 344431-84-1 HCAPLUS

CN Urea, N-[1,1'-biphenyl]-2-yl-N'-[1-[8-[4-(diphenylmethyl)-1-piperazinyl]octyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 344434-88-4 HCAPLUS

CN Urea, N-[1,1'-biphenyl]-2-yl-N'-[1-[9-[4-(diphenylmethyl)-1-piperazinyl]nonyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 24 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:790476 HCAPLUS

DOCUMENT NUMBER: 133:350248

TITLE: Preparation of piperazine derivatives useful as CCR5

antagonists

INVENTOR(S): Baroudy, Bahige M.; Clader, John W.; Josien, Hubert

B.; Mccombie, Stuart W.; Mckittrick, Brian A.; Miller, Michael W.; Neustadt, Bernard R.; Palani, Anandan; Smith, Elizabeth M.; Steensma, Ruo; Tagat, Jayaram R.;

Vice, Susan F.; Laughlin, Mark A.; Gilbert, Eric;

Labroli, Marc A.

PATENT ASSIGNEE(S): Schering Corporation, USA; et al.

SOURCE: PCT Int. Appl., 109 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PAT	CENT	NO.			KIN)	DATE			APPL:	ICAT	ION	NO.		D	ATE	
WO	2000	0665	58		A1	_	2000	1109	•	WO 2	000-	US11	632		2	0000	501
	W:	ΑĖ,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,
		CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	HR,	ΗU,	ID,	IL,	IN,
		IS,	JP,	KG,	KR,	KZ,	LC,	LK,	LR,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,
		MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,
		TZ,	UA,	US,	UZ,	VN,	YU,	za									
	RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SL,	SZ,	TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,	DE,
		DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,
		CG,	CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	NΕ,	SN,	TD,	TG				
CA	2371	583			AA		2000	1109		CA 2	000-	2371	583		2	0000	501
CA	2371	583			C		2005	0913									
ΕP	1175	401			A1		2002	0130		EP 2	000-	9264	86	•	2	0000	501
EΡ	1175	401			B1		2005	0720									
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,

IE, SI, LT,	LV, FI	, RO				
BR 2000010304	A	20020213	BR	2000-10304		20000501
TR 200103214	T2	20020321	TR	2001-200103214		20000501
AU 780888	B2	20050421	AU	2000-45009		20000501
AT 299865	E	20050815	AT	2000-926486		20000501
JP 3722700	B2	20051130	JP	2000-615389		20000501
ZA 2001008868	Α	20030127	ZA	2001-8868		20011026
NO 2001005366	Α	20020103	NO	2001-5366		20011102
HK 1039930	A1	20051209	HK	2002-100824		20020202
PRIORITY APPLN. INFO.:			US	1999-305226	A2	19990504
			US	1999-305266	Α	19990504
			WO	2000-US11632	W	20000501
OTHER COMPCE(C).	маррат	122.250249				

OTHER SOURCE(S): MARPAT 133:350248

$$R^{2}CR^{1}R^{3}$$
 R^{4}
 R^{5}
 R^{6}
 R^{7}
 R

AB The title compds. I [Ra = optionally substituted Ph, pyridyl, thiophenyl, naphthyl; R1 = H, alkyl; R2 = substituted Ph, substituted heteroaryl, naphthyl, fluorenyl, diphenylmethyl or optionally substituted phenyl- or heteroarylalkyl; R3 = H, alkyl, alkoxyalkyl, cycloalkyl, cycloalkylalkyl, or optionally substituted Ph, phenylalkyl, naphthyl, naphthylalkyl, heteroaryl, heteroarylalkyl; R4, R5, R7 = H, alkyl; R6 = H, alkyl, alkenyl], CCR5 antagonists, were prepared E.g., piperazine derivative II was prepared

IT 306296-55-9P 306296-59-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of piperazine derivs. useful as CCR5 antagonists)

RN 306296-55-9 HCAPLUS

CN Piperidine, 4-[(3S)-4-(diphenylmethyl)-3-methyl-1-piperazinyl]-1-[4-[[(ethylamino)carbonyl]amino]-2,6-dimethylbenzoyl]-4-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN306296-59-3 HCAPLUS

Piperidine, 4-[(3S)-4-(diphenylmethyl)-3-methyl-1-piperazinyl]-1-[4-CN [[(ethylamino)carbonyl]methylamino]-2,6-dimethylbenzoyl]-4-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 25 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

1999:53389 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 130:139358

TITLE: Preparation and formulation of tricyclic compounds

> useful for inhibition of farnesyl protein transferase Taveras, Arthur G.; Mallams, Alan K.; Afonso, Adriano;

INVENTOR(S):

Remiszewski, Stacy W.; Njoroge, F. George; Doll,

Ronald; Lalwani, Tarik; Alvarez, Carmen

PATENT ASSIGNEE(S): Schering Corporation, USA

SOURCE: U.S., 71 pp.

CODEN: USXXAM DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
		~		
US 5861395	Α	19990119	US 1997-927469	19970911
PRIORITY APPLN. INFO.:			US 1997-927469	19970911
OMITTED COLUMNIA (A)	MADDAG	1 1 2 0 1 2 0 2 5 0		

OTHER SOURCE(S): MARPAT 130:139358

- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- AB The title compds., e.g., I [W = cyano, etc.; R1 = H, halo, etc.; R3, R4 = H, halo, CF3, etc.; or R3R4 = saturated or unsatd. C5 C7 fused ring to the benzene ring; X represents N, CH, or C, which C may contain an optional double bond (represented by the dotted line); dotted line represents an optional double bond; when such a double bond is present between the two C atoms bearing A and B, A and B independently represent R10, halo, etc.; when no such double is present, A and B each independently represent H2, (OR11)2, H and halo, dihalo, etc.; R10 = H, alkyl, etc.; R11 = alkyl, aryl] are prepared The title compound II in vitro showed IC50 of 0.1 μM against farnesyl protein transferase.
- IT 204712-16-3P 204712-17-4P 204712-59-4P 204712-60-7P 204712-66-3P 204712-67-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of tricyclic compds. useful for inhibition of farnesyl protein transferase)

- RN 204712-16-3 HCAPLUS
- CN 1-Piperidinecarboximidic acid, N-[[(aminocarbonyl)amino]carbonyl]-4-[2-[4-(3-bromo-8-chloro-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl)-1-piperazinyl]-2-oxoethyl]-, phenyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

Pryor 10 637163-history.trn

| | |

OPh

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PAGE 2-A

RN 204712-17-4 HCAPLUS

CN Piperazine, 1-[[1-[[[(aminocarbonyl)amino]carbonyl]amino]iminomethyl]-4-piperidinyl]acetyl]-4-(3-bromo-8-chloro-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl)- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

O NH

RN 204712-59-4 HCAPLUS

CN 1-Piperidinecarboximidic acid, N-(aminocarbonyl)-4-[2-[4-(3-bromo-8-chloro-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl)-1-piperazinyl]-2-oxoethyl]-, phenyl ester (9CI) (CA INDEX NAME)



RN 204712-60-7 HCAPLUS

CN

1-Piperidinecarboximidic acid, 4-[2-[4-(3-bromo-8-chloro-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl)-1-piperazinyl]-2-oxoethyl]-N-[(methylamino)carbonyl]-, phenyl ester (9CI) (CA INDEX NAME)

RN 204712-66-3 HCAPLUS
CN Piperazine, 1-[[1-[[(aminocarbonyl)amino]iminomethyl]-4piperidinyl]acetyl]-4-(3-bromo-8-chloro-6,11-dihydro-5Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl)- (9CI) (CA INDEX NAME)

|| || O NH

RN 204712-67-4 HCAPLUS

CN

Piperazine, 1-(3-bromo-8-chloro-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl)-4-[[1-[imino[[(methylamino)carbonyl]amino]methyl]-4-piperidinyl]acetyl]- (9CI) (CA INDEX NAME)

PAGE 2-A

|| || O NH

REFERENCE COUNT:

THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 26 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

28

ACCESSION NUMBER:

1998:180864 HCAPLUS

DOCUMENT NUMBER:

128:230251

TITLE:

Preparation of benzocycloheptapyridines as farnesyl

protein transferase inhibitors

INVENTOR(S):

Taveras, Arthur G.; Mallams, Alan K.; Afonso, Adriano;

Remiszewski, Stacy W.; Njoroge, F. George; Doll,

Ronald J.; Lalwani, Tarik; Alvarez, Carmen

PATENT ASSIGNEE(S):

Schering Corp., USA

SOURCE:

PCT Int. Appl., 147 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
		- -		
WO 9811091	A2	19980319	WO 1997-US19976	19970911
WO 9811091	A3	19980611		
W: AT, AM, AII.	A7. BA	. BB. BG. BR	. BY. CA. CN. CZ. EE.	GE. HU. ID.

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IL, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX,
             NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UZ, VN,
             YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR,
             GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA,
             GN, ML, MR, NE, SN, TD, TG
    CA 2266014
                           AA
                                 19980319
                                              CA 1997-2266014
                                                                      19970911
    AU 9851966
                                              AU 1998-51966
                           A1
                                 19980402
                                                                      19970911
    EP 934303
                                              EP 1997-946875
                                 19990811
                                                                      19970911
                           A2
    EP 934303
                           B1
                                 20041229
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE,
             LT, LV, FI, RO
    CN 1237164
                                 19991201
                                              CN 1997-199597
                           Α
                                                                      19970911
    BR 9712980
                           Α
                                 20000418
                                              BR 1997-12980
                                                                      19970911
    NZ 334454
                                              NZ 1997-334454
                                 20000825
                           Α
                                                                      19970911
    JP 2001500515
                           T2
                                              JP 1998-514032
                                 20010116
                                                                      19970911
    AT 286044
                                              AT 1997-946875
                           Ε
                                 20050115
                                                                      19970911
     ES 2234036
                           Т3
                                              ES 1997-946875
                                 20050616
                                                                      19970911
    NO 9901235
                           Α
                                 19990510
                                              NO 1999-1235
                                                                      19990312
     KR 2000036110
                           Α
                                 20000626
                                              KR 1999-702133
                                                                      19990312
                                              US 1996-713297
PRIORITY APPLN. INFO.:
                                                                  Α
                                                                     19960913
                                              US 1997-877453
                                                                  Α
                                                                      19970617
                                              WO 1997-US19976
                                                                  W
                                                                      19970911
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OTHER SOURCE(S): MARPAT 128:230251

GΙ

AB Title compds. [I; 1 of a,b,c,d = N or NR9 and the others = CR1 or CR2; A,B = halo, R10, OR11, H2, H and halo, H and alkyl, etc.; R1-R4 = H, halo, alkoxy, (di)alkylamino, etc.; R3R4 = atoms to complete a ring; R5-R8 = H, (alkoxy)alkyl, alkanoyl, aryl, etc.; R9 = oxido, Me, (CH2)nCO2H; R10 = H, (ar)alkyl, aryl; R11 = alkyl or aryl; X = N, C, CH; n = 1-3; R = cyano, COR12, C(:NR13)OR14, C(:NR13)NR1OR16, etc.; R12 = H, alkyl, heterocyclyl, etc.; R13 = H, cyano, alkylsulfonyl, alkanoyl, (un)substituted SO2NH2, etc.; R14 = aryl; R16 = (cyclo)alkyl, (hetero)aryl(alkyl), heterocyclylalkyl] were prepared Thus, title compound II (R14 = H) was N-acylated with PhOCN to give II (R14 = 1-phenoxycarbonimidoylpiperidine-4-acetyl). Data for biol. activity of I were given.

IT 204712-16-3P 204712-17-4P 204712-59-4P 204712-60-7P 204712-66-3P 204712-67-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

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study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of benzocycloheptapyridines as farnesyl protein transferase inhibitors)

RN 204712-16-3 HCAPLUS

CN 1-Piperidinecarboximidic acid, N-[[(aminocarbonyl)amino]carbonyl]-4-[2-[4-(3-bromo-8-chloro-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl)-1-piperazinyl]-2-oxoethyl]-, phenyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

|| | O OPh

RN 204712-17-4 HCAPLUS

CN Piperazine, 1-[[1-[[[(aminocarbonyl)amino]carbonyl]amino]iminomethyl]-4-piperidinyl]acetyl]-4-(3-bromo-8-chloro-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl)- (9CI) (CA INDEX NAME)

|| || O NH

RN 204712-59-4 HCAPLUS

CN 1-Piperidinecarboximidic acid, N-(aminocarbonyl)-4-[2-[4-(3-bromo-8-chloro-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl)-1-piperazinyl]-2-oxoethyl]-, phenyl ester (9CI) (CA INDEX NAME)



RN 204712-60-7 HCAPLUS

CN 1-Piperidinecarboximidic acid, 4-[2-[4-(3-bromo-8-chloro-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl)-1-piperazinyl]-2-oxoethyl]-N-[(methylamino)carbonyl]-, phenyl ester (9CI) (CA INDEX NAME)

|| OPh

RN

204712-66-3 HCAPLUS
Piperazine, 1-[[1-[[(aminocarbonyl)amino]iminomethyl]-4piperidinyl]acetyl]-4-(3-bromo-8-chloro-6,11-dihydro-5Hbenzo[5,6]cyclohepta[1,2-b]pyridin-11-yl)- (9CI) (CA INDEX NAME) CN

204712-67-4 HCAPLUS

RN

CN Piperazine, 1-(3-bromo-8-chloro-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-yl)-4-[[1-[imino[[(methylamino)carbonyl]amino]methyl]-4-piperidinyl]acetyl]- (9CI) (CA INDEX NAME)

PAGE 2-A

|| || O NH

L15 ANSWER 27 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:9205 HCAPLUS

DOCUMENT NUMBER: 126:47112

TITLE: 2-Ureidobenzamide derivatives useful as

acyl-CoA:cholesterol acyltransferase inhibitors

INVENTOR(S): Binet, Jean; Guffroy, Christian; Kasai, Hirotaka;

Wagatsuma, Nagatoshi

PATENT ASSIGNEE(S): Grelan Pharmaceutical Co., Ltd., Japan; Laboratoires

Fournier SA

SOURCE: Eur. Pat. Appl., 32 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 742208	A1	19961113	EP 1995-401049	19950505
R: FR				
CA 2194481	AA	19961107	CA 1996-2194481	19960427
WO 9634856	A1	19961107	WO 1996-EP1836	19960427
W: AU, CA, HU,	JP, KR	, NO, US		

	RW: A	T, BE	CH,	DE, I	DK, ES,	FI, F	FR, GB,	GR, I	E, IT,	LU,	MC,	NL,	PT,	SE
AU	965763	5		A1	1996	1121	AU 1	996-57	635		1	99604	427	
EP	769007			A1	1997	0423	EP 1	996-91	4173		1	99604	427	
	R: B	E, CH	, DE,	DK, I	ES, FI,	FR, C	GB, IE,	IT, L	I, NL,	SE				
JP	105069	22		T2	1998	0707	JP 1	996-53	3007		1	99604	427	
JP	101206	44		A2	1998	0512	JP 1	996-29	5968		1	9961	018	
NO	960545	9		Α	1996	1218	NO 1	996-54	59		1	9961	218	
US	587211	5		Α	1999	0216	US 1	996-76	5314		1	99612	230	
PRIORITY	APPLN	. INFO	o.:				EP 1	995-40	1049	7	1	9950	505	
							WO 1	996-EP	1836	ī	1	99604	427	
OWITED CO	א שמתוני	١.		MADD	7m 196.	47112								

OTHER SOURCE(S): MARPAT 126:47112

GΙ

AΒ The invention relates to 2-ureidobenzamide compds. I [R1 = H, halo, alkyl, alkoxy, dialkylamino; R2 = H, halo, OH, nitro, alkyl, alkoxy, or (CH2)0-2NR3R4; R3, R4 = H, alkyl, alkylsulfonyl, alkylcarbamoyl; or NR3R4 form pyrrolidine, piperidine, morpholine, imidazole, or pyrazole ring; X = alkyl or (CH2)1-4NR5R6; R5, R6 = H, alkyl, alkoxycarbonyl; Y = H, alkyl; Z = N-substituted pyrrolidinyl or piperidinyl radicals with an optional alkylene or (cyclo)alkylidene linker; or NYZ = imidazolidino or (homo)piperazino bearing a Ph, CHPh2, or (un)substituted dibenzocycloheptenyl group on the second N atom] and their pharmaceutically acceptable acid addn salts. The compds. are acyl-CoA: cholesterol acyltransferase (ACAT) inhibitors, useful for the prevention and treatment of disorders and diseases such as atherosclerosis. Examples include 61 syntheses and 2 standard formulations. For instance, amidation of 5-(dimethylamino)-2-nitrobenzoic acid with 4-(aminomethyl)-1-(diphenylmethyl)piperidine (47%), hydrogenation of the nitro group (100%), N-acylation of the resultant amino group with ClCO2Ph, and aminolysis of the carbamate with n-heptylamine (62%), gave title compound II. The IC50 of II for ACAT inhibition from 2 in vitro bioassays (microsome and intact cell) was 0.6 and 0.007 μM , resp., and the activity in a mouse peritoneal macrophage assay was higher than the known

II

compds. E5324 and CI976. ΙT

184780-04-9P 184780-19-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of ureidobenzamide derivs. as ACAT inhibitors)

RN 184780-04-9 HCAPLUS

Piperazine, 1-(diphenylmethyl)-4-[2-[[(heptylamino)carbonyl]amino]benzoyl]-CN(9CI) (CA INDEX NAME)

184780-19-6 HCAPLUS RN

Piperazine, 1-(10,11-dihydro-5H-dibenzo[a,d]cyclohepten-5-yl)-4-[2-CN [[(heptylamino)carbonyl]amino]benzoyl] - (9CI) (CA INDEX NAME)

L15 ANSWER 28 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:926097 HCAPLUS

DOCUMENT NUMBER: 123:340182

TITLE: Preparation of hydroxamic acid derivative for

inhibiting proliferation of smooth muscle cells and

medicinal preparation containing the same

INVENTOR(S): Isozaki, Masashi; Kasukawa, Hiroaki; Nakazawa,

Keiichi; Houki, Keiko

PATENT ASSIGNEE(S): Terumo K K, Japan

SOURCE: PCT Int. Appl., 34 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9513264	A1	19950518	WO 1994-JP1870	19941104
W: US				
RW: AT, BE, CH,	DE, DK	, ES, FR, GB	, GR, IE, IT, LU, M	C, NL, PT, SE
JP 07278086	A2	19951024	JP 1994-251094	19941017
PRIORITY APPLN. INFO.:			JP 1993-278168	A 19931108
			JP 1994-22475	A 19940221
OTHER SOURCE(S):	MARPAT	123:340182		

Q =
$$R1-L \longrightarrow (CH=CH)_{n}-CON(OM)_{R2}$$

$$R3-N \longrightarrow N-CH=CHCOR$$

$$II$$

$$CH=CH \longrightarrow CH=CHCOR$$

$$II$$

$$CH=CH \longrightarrow CON(OH)_{n}$$

$$CH=CH \longrightarrow CON(OH)_{n}$$

$$III$$

AB Hydroxamic acid derivs. [I; R1 = Ph, aryloxyphenyl, Q; wherein R3= aryl or aryl-C1-4 alkyl; L = C1-8 alkylene, C2-8 alkenylene, (CH2)mO (wherein m = an integer 0-4), CO; n = 0 or 1; R2 = H, C1-4 alkyl, aryl-C1-4 alkyl; M = H, alkanoyl, alkoxycarbonyl, a medicinally acceptable cation], having the effect of suppressing smooth muscle fiber growth and useful as vascular wall thickening preventives, post-percutaneous transluminal coronary angioplasty (PTCA) restenosis preventives, and even antiarteriosclerotic agents, are prepared Thus, cinnamic acid derivative (II; R = OH) was stirred with oxalyl chloride and DMF in CH2Cl2 for 2h and the reaction solution was added dropwise to a solution of N-methylhydroxylamine hydrochloride and Et3N in aqueous THF, followed by stirring the resulting mixture at room temperature for 2 h

to give 62.3% N-hydroxy-p-piperazinylmethylcinnamamide II (R = NMeOH). This compound and N-hydroxybenzamide derivative (III) in vitro showed IC50 of $2.0\,+\,10-7$ mol for specifically inhibiting the proliferation of smooth muscle cells of a rat thoracic aorta.

IT 170429-94-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate for preparation of hydroxamic acid derivative for inhibiting proliferation of smooth muscle cells)

RN 170429-94-4 HCAPLUS

CN 2-Propenamide, N-(acetyloxy)-3-[4-[[4-[(4-chlorophenyl)phenylmethyl]-1-piperazinyl]methyl]phenyl]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} AcO & O \\ i-Pr-N-C-CH = CH \\ \hline \\ CH_2-N \end{array} \begin{array}{c} Ph \\ CH \\ \hline \end{array}$$

IT 170429-91-1P 170429-92-2P 170429-93-3P 170429-94-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of hydroxamic acid derivative for inhibiting proliferation of smooth muscle cells)

RN 170429-91-1 HCAPLUS

CN 2-Propenamide, 3-[4-[(4-chlorophenyl)phenylmethyl]-1piperazinyl]methyl]phenyl]-N-hydroxy-N-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} HO & O \\ \hline \\ Me-N-C-CH \\ \hline \\ CH_2-N \\ \end{array} \begin{array}{c} Ph \\ \hline \\ CH \\ \end{array} \begin{array}{c} C1 \\ \hline \end{array}$$

RN 170429-92-2 HCAPLUS

CN 2-Propenamide, 3-[4-[[4-[(4-chlorophenyl)phenylmethyl]-1-piperazinyl]methyl]phenyl]-N-hydroxy-N-(1-phenylethyl)- (9CI) (CA INDEX NAME)

RN 170429-93-3 HCAPLUS

CN Benzamide, 4-[[4-[(4-chlorophenyl)phenylmethyl]-1-piperazinyl]methyl]-N-hydroxy-N-(1-phenylethyl)- (9CI) (CA INDEX NAME)

RN 170429-94-4 HCAPLUS

CN 2-Propenamide, N-(acetyloxy)-3-[4-[[4-[(4-chlorophenyl)phenylmethyl]-1-piperazinyl]methyl]phenyl]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} AcO & O \\ & & \\ \downarrow & \parallel \\ i-Pr-N-C-CH = CH \\ & CH_2-N \end{array} \begin{array}{c} Ph \\ & \\ CH \end{array}$$

L15 ANSWER 29 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1981:569217 HCAPLUS

DOCUMENT NUMBER: 95:169217

TITLE: Thiazole derivatives and pharmaceutical composition

comprising them

INVENTOR(S): Ueda, Ikuo; Morino, Daizou; Takimoto, Koichi PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 64 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 32058	A 1	19810715	EP 1980-304740	19801229
EP 32058	B1	19831026		
R: AT, BE, CH,	DE, FR	, GB, IT,	LU, NL, SE	
US 4411900	A	19831025	US 1980-215372	19801211
CA 1154764	A1	19831004	CA 1980-367494	19801223
JP 56103168	A2	19810818	JP 1980-189341	19801229
JP 01014229	B4	19890310		
AT 5138	E	19831115	AT 1980-304740	19801229
PRIORITY APPLN. INFO.:			GB 1980-162 A	19800103
			EP 1980-304740 A	19801229
GI				

$$R \xrightarrow{R^1} X - N \xrightarrow{NR^2} I \xrightarrow{R^3NH} S \xrightarrow{CH_2N} NCHPh_2$$

AB Aminoalkylthiazoles I (X = alkylene, thiaalkylene; X1 = C1-3 alkylene; R = H, amino; R1 = H, halogen, alkyl, aryl; R2 = aralkyl, haloaralkyl) were prepared 2-Acetamido-4-chloromethylthiazole was treated with 1-benzhydrylpiperazine to give II (R3 = Ac), which was deacetylated and mesylated to give II (R3 = MeSO2). At 1 mg/kg orally in guinea pigs II (R3 = MeSO2) gave 100% inhibition of anaphylactic asthma.

IT 79387-40-9P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 79387-40-9 HCAPLUS

CN Urea, N-[4-[[4-(diphenylmethyl)-1-piperazinyl]methyl]-2-thiazolyl]-N'-methyl-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 79387-39-6 CMF C23 H27 N5 O S

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

L15 ANSWER 30 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1981:550706 HCAPLUS

DOCUMENT NUMBER: 95:150706

TITLE: Piperazine derivative, processes for the preparation

therof, and pharmaceutical composition comprising the

same

INVENTOR(S): Teraji, Tsutomo; Oku, Teruo; Namiki, Takayuki

PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan

SOURCE: Brit. UK Pat. Appl., 14 pp.

CODEN: BAXXDU

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
GB 2056968	Α	19810325	GB 1979-29092		19790821	
JP 56032474	A2	19810401	JP 1980-115296		19800820	
PRIORITY APPLN. INFO.:			GB 1979-29092	Α	19790821	
GT						

$$\begin{array}{c} R \\ \\ R1 \end{array} \qquad \begin{array}{c} R \\ \\ ZZ^{1}N \end{array} \qquad \begin{array}{c} NR^{2} \\ \\ I \end{array}$$

AB Piperazines I [R = CO2H, CO2H derivative, acylamino; R1 = H, halo, alkyl, alkoxy, aryl, acylamino; R2 = aralkyl; Z = NR3, O, S, NHCO (R3 = H, acyl); Z1 = alkylene], and their pharmaceutically acceptable salts, having antiallergic activity, were prepared E. g., a solution of

h at 70°, cooled to room temperature, treated with Na2SO3 (pH 1, 10% HCl), diluted with EtOAc, adjusted to pH 9 (aqueous NaHCO3), and stirred 0.5 h to

give

I [R = CO2H, R1 = H, R2 = CHPh2, Z = NH, Z1 = (CH2)3] (II). A 10 mg/kg p.o. dose of II produced complete inhibition of anaphylactic asthma in guinea pigs.

T79310-69-3P 79310-72-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of, as allergy inhibitor)

RN 79310-69-3 HCAPLUS
CN Urea, N-[2-[[3-[4-(diphenylmethyl)-1-piperazinyl]propyl]amino]phenyl]-N'methyl- (9CI) (CA INDEX NAME)

L15 ANSWER 31 OF 31 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1979:54975 HCAPLUS

DOCUMENT NUMBER: 90:54975

TITLE: 5-[4-(Diarylmethyl)-1-piperazinylalkyl]benzimidazole

derivatives

INVENTOR(S): Raeymaekers, Alfons H. M.; Van Gelder, Josephus L. H.;

Boeckx, Gustaaf M.; Van Hemeldonck, Lodewijk L.

PATENT ASSIGNEE(S): Janssen Pharmaceutica N. V., Belg.

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DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DD 0012502		10001005	DD 1000 0010500	
DE 2813523	A1	19781005	DE 1978-2813523	19780329
US 4179505	A	19791218	US 1978-866882	19780104
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			· 	

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PRIORITY APPLN. INFO.: US 1977-782651 A 19770330

US 1978-866882 A 19780104

RR1CHN
$$N(CH_2)_n$$
 R^5 R^3 R^4 NR^2 R^4 NR^2 R^4 NR^2 R^4 NR^4 N

The benzimidazole derivs. I [R = R1 = thienyl, pyridyl, Ph optionally substituted by H, NO2, alkyl, alkoxy; R2 = H, alkyl, cycloalkyl, aralkyl, (esterified or etherified) hydroxy- or mercaptoalkyl, haloalkyl; R3 = R2, R4R5 = bond; R3R4 = O, R5 = H; n = 1, 2] and their salts were prepared for use as antihistaminics at 0.0025-0.16 mg/mL in vitro and as antianaphylactics at 2.5 mg/kg in vivo. Thus, II (prepared by the reaction of 4,3-Cl(O2N)C6H3CH2Cl with 1-(diphenylmethyl)piperazine, followed by N-alkylation and reduction) reacted with MeC(OEt)3 in HOAc to give I (R = R1 = Ph, R2 = Pr, R3 = H, R4R5 = bond, n = 1).

IT 68732-82-1P 68732-83-2P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 68732-82-1 HCAPLUS

CN Urea, N-butyl-N'-[5-[[4-(diphenylmethyl)-1-piperazinyl]methyl]-1-methyl-1H-benzimidazol-2-yl]- (9CI) (CA INDEX NAME)

RN 68732-83-2 HCAPLUS

CN Urea, N-butyl-N'-[5-[[4-(diphenylmethyl)-1-piperazinyl]methyl]-1-ethyl-1H-benzimidazol-2-yl]- (9CI) (CA INDEX NAME)

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